CANADIAN

Contract Record

A Weekly Journal of Public Works, Tenders, Advance Information and Municipal Progress

This Paper Reaches Every Week the Town and City Clerks, Town and City Engineers, County Clerks and County Engineers, Purchasers of Municipal Debentures and Leading Contractors in All Lines Throughout Canada

VOL. 16. TORONTO, MONTREAL — JANUARY 3, 1906 — WINNIPEG, VANCOUVER No. 44

THE CANADIAN CONTRACT RECORD
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CARD

The undersigned, having a certain amount of time at his disposal, invites employment.

W. FRASER, Quantity Surveyor,
142 Grace Street, Toronto.

TENDERS WANTED

for the building of a stone Tower and Spire for St. Michael's Church, Belleville, Ont. Plans and specifications may be seen at the residence of Rev. Father Twomey, Belleville. Tenders received up to JANUARY 15TH, 1906.

Tenders For Bridge

Tenders, addressed to James Coxford, Esq., Chairman of Committee, Pembroke, Ont., and marked Tenders for Bridge, will be received up to two o'clock in the afternoon of MONDAY, 22ND DAY OF JANUARY, 1906, for the construction of a Steel Bridge with Stone foundations across the Madawaska River in the Township of McNab (near Arnprior,) in the County of Renfrew.

Plans and specifications may be seen at the offices of James H. Smith, County Engineer, Pembroke, and John Brennen, Esq., Councillor, Sand Point.

FOR SALE

The Corporation of the Town of Parry Sound, Ontario, will receive sealed tenders at the office of E. E. Armstrong, Town Clerk, up to and including the 13TH DAY OF JANUARY, 1906, for the following Electrical Apparatus: One direct connected 450 k.w. 60 cycle 2080 v. 3-phase revolving field Alternator, also one direct connected Exciter suitable for the above machine, together with switchboard all complete, f.o.b. power house, Parry Sound.

Bids will also be received for water wheels suitable to drive the above machine either connected to the present wheels or not, as may be most suitable. For information re. water wheels, address

G. GROVES, Box 422,
Parry Sound, Ont.

Specification of Electrical Apparatus may be seen at the office of the Town Clerk.

BRIDGE TENDERS WANTED

Sealed tenders will be received by the undersigned on behalf of the County of Huron, at Wingham P. O., Ont., until 4 o'clock p. m. on SATURDAY, THE 20TH DAY OF JANUARY, 1906, for the erection of the Superstructure of the following Steel Bridges in the said county, viz.:

(1) A Steel Bridge to be erected over the Maitland River, at Jamestown, on the boundary between Morris and Grey Townships, about 5 miles from G.T.R. station at Brussels. The Bridge is to be of one span 110 ft. clear between abutments, Pratt truss, 19 ft. high, of 7 panels, roadway 16 ft. wide, steel joints, at 2 ft. centres, floor 3 in. Roch Elm or Tamarack; wheel guards, 5" x 5" of Pine or Cedar; railing, 4 ft. high of 4 tiers of 1½ in. gas pipe. Required strength, 125 lbs. per square foot of floor surface, with large safety factor, to be strong enough for concrete floor. About 14 ft. from bed of stream to floor, hard bottom, little water, good place to erect. The bridge is to be completed on or before the 25th day of July, next, 1906.

(2) A Steel Bridge to be erected over the Maitland River about ¾ mile west of the Village of Wroxeter, on the C. P. R., on the boundary between Howick and Turnberry Townships. The bridge is to be of one span 120 ft. clear between abutments, Pratt truss, 20 ft. high, of 8 panels; roadway 16 ft. wide, steel joints, at 2 ft. centres, floor 3 in. Rock Elm or Tamarack; wheel guards, 5" x 5", of Pine or Cedar; railing, 4 ft. high of 4 tiers of 1½ in. gas pipe. Required strength, 125 lbs. per square foot of floor surface, with large safety factor to be strong enough for concrete floor. About 13 ft. from bed of stream to floor, hard bottom, little water, and good place to erect The bridge is to be completed on or before the 15th day of August, next, 1906.

(3) A Steel Bridge to be erected about ½ mile north of the Village of Belgrave, on the G.T.R. It is to be of one span 25 ft. clear between abutments, Warren truss, roadway 16 ft. wide, steel joints, at 2 ft. centres, concrete floor. Required strength, 125 lbs. per square foot of floor surface, with good safety factor. About 8 ft. from bed of stream to floor, hard bottom, little water, good place to erect. The bridge is to be completed on or before the 15th day of July, next, 1906.

(4) A Steel Beam Bridge to be erected on the boundary between Grey and Morris Townships, about 3 miles from Brussels, on the G.T.R. It is to be of one span 20 ft clear between abutments; roadway, 16 ft. wide, steel joints, at 2 ft. centres, concrete floor. Pipe railing, 4 ft. high of 4 tiers of 1¼ in. gas pipe. Required strength, 125 lbs. per square foot of floor surface. About 8 ft. from bed of stream to floor, little water, good place to erect. The bridge is to be completed on or before the 1st day of August, next, 1906.

Tenders must be accompanied by marked cheque equal to 10 per cent. of the contract price and payable to the County Treasurer. Should any party fail to execute the necessary contract and bonds or to give satisfactory security for due fulfilment of the contract, the deposit accompanying the tender will then be forfeited to the County of Huron.

The deposits of unsuccessful tenderers will be returned.

The lowest or any tender not necessarily accepted.

JOHN ANSLEY,
County Commissioner for Huron County,
Wingham, Ont.

Wingham, Ont., December, 28, 1905.

H. & W. Gamache, plumbers, Montreal, have registered.

A meeting of the creditors of James Dwyer, contractor, Chelmsford, Ont., will be held on the 5th inst.

TENDERS
For Supply of Turbine Pump

Mailed tenders addressed to Ald. J. C. Gibson, Chairman Fire, Water and Light Committee, for supply of one turbine pump with electric motor, for the city waterworks, will be received at the office of the undersigned up to 3.30 p. m. on

MONDAY, JANUARY 22, 1906.

Specifications and forms of tender may be obtained at the office of Col. H. N. Ruttan, City Engineer, Winnipeg, Manitoba.

Each tender must be accompanied by an accepted cheque or draft payable to the order of the city treasurer, or cash deposit for the sum called for in the form of tender supplied, which will be subject to forfeiture in case of failure on the part of the contractor to enter into a written contract with approved sureties if called upon to do so.

The city reserves the right to reject any or all tenders, or to accept any bid which appears advantageous to the City of Winnipeg

C. J. BROWN,
City Clerk.

City Clerk's Office,
Winnipeg, Dec. 27, 1905.

CONTRACTS OPEN.

PRESCOTT, ONT.—The sewerage extension by-law was defeated.

BERLIN, ONT.—The $8,000 market extension by-law was defeated.

TREHERNE, MAN. — A drainage system for this place is wanted.

AURORA, ONT.—The $10,000 by-law for waterworks improvements was carried.

HARROW, ONT.—Additions to the electric light plant are under consideration.

BRANTFORD, ONT.—The by-law to raise $45,000 for school improvements was carried.

MEDICINE HAT, N.W.T.—The Salvation Army propose building a barracks here.

KINNEAR'S MILLS, QUE.—Dr. Kellock's congregation intend erecting a new parsonage.

CLINTON, ONT.—The ratepayers rejected the by-law to raise $20,000 for a waterworks system.

PICTON, ONT. — The ratepayers carried the by-law to raise $15,000 for new street lighting system.

SELKIRK, MAN. — The by-law to raise $9,000 for building a new school was carried here last week.

MEAFORD, ONT.—Debentures will be issued issued for $4,561.61 and $4,514.40 for granolithic sidewalks.

STRATFORD, ONT.—The by-law to raise funds for a storm sewerage system was defeated on Monday last.

EAST TORONTO, ONT. — New plans are being prepared for the new High school, estimated to cost $15,000.

QUEBEC, QUE.—Faguy, Lepinay & Frier, merchants, John street, have purchased the building adjoining their

[illegible] nt and intend making ex[illegible]rations, which will be commenced in the early spring.

WOLSELEY, ASSA.—The German Lutherans will erect a large seminary here for the education of home missionaries.

FERNIE, B.C. — The Town Clerk has been authorized to advertise sewer and fire improvement debentures for sale.

McADAM, N.B.—The C.P.R. will expend about $30,000 on yard accommodation and building a freight warehouse here.

GODERICH, ONT.—A by-law to guarantee debentures of the Goderich Elevator and Transit Company was defeated.

ST. CATHARINES, ONT.—The by-laws to build new schools and extend the waterworks and sewerage systems were all defeated.

BARRIE, ONT.—By-laws to raise $8,500 for streets and sidewalks and $1,500 for an electric fire alarm system were carried.

TRURO, N.S. — The Truro Knitting Mills Company have purchased twenty-seven acres of land and purpose extending their plant.

LOUISBURG, N.S.—The Cape Breton Coal, Iron and Railway Company are surveying a site at Slattery's Head for a coal pier.

TORONTO JUNCTION, ONT.—It is probable that the new Council will take steps to improve and extend the waterworks system.

KINGSTON, ONT.— Mrs. Connell, 25 West street, will receive tenders up to January 8th for plumbing and cement work in General Hospital.

GRAND FORKS, B.C.—F. M. Kirby, P. L. S., has been making a survey of the location for the proposed Government bridge at Fourth street.

FORT FRANCIS, ONT. — The Catholics propose building a new church, 32 x 70 feet, brick veneer, stone foundation. Contracts will be let this winter.

BOBCAYGEON, ONT.—The ratepayers unanimously approved of the by-law to raise $25,000 to purchase a water power and establish an electric light plant.

BATTLEFORD, SASK. — A local company is being formed to build a $40,000 hotel on corner of 22nd street and 2nd avenue. A. Champagne is interested.

CALGARY, N.W.T. — The tenders received for building a four roomed school were considered too high and none were accepted. — The city will likely build a crematory.

SOUTHAMPTION, ONT.—The by-law fixing the assessment of the Grand Trunk Railway, in consideration of the building of an $8,000 depot, was carried by over 300 majority.

PRINCE ALBERT, SASK.—Willis Chipman, C.E., Toronto, is preparing plans for the development of a water power about twelve miles from this place, for municipal purposes.

METZ, ONT.—D. Smith is this week taking tenders on the erection of a stone or brick Presbyterian church, from plans by F. Washburn, architect, Arthur. The building is to be erected in the spring.

WINGHAM, ONT.—By-laws were carried here on Monday fixing the assessment of a door factory, to issue $1,500 of debentures for building a bridge and a third to establish a High school.

REGINA, ASSA. — W. W. LaChance, architect, is preparing plans for a new hotel building to be erected by local capitalists. Same architect is taking tenders on a residence for Lewis J. Block.

EDMONTON, ALTA.—George E. Handley, said to be acting for Minneapolis capitaliststs, has purchased property at the corner of Fraser and Rice street, the intention being to erect an office building thereon.

VERNON, B.C. — St. Louis and Cleveland capitalists, headed by Mr. Horsling, of the latter city, have purchased extensive iron deposits near Crawford Bay and propose to establish a plant for the manufacture of steel rails.

QUEBEC, QUE.—The Quebec Railway, Power & Navigation Company, of this city and New York, are in the market for 12,000 barrels of cement for their extensive works at Seven Islands. Mr. Hardy, of New York, is their engineer.

LONDON, ONT.—It is understood that the Grand Trunk Railway propose to proceed with the widening of the Wortley road bridge. — The by-law authorizing the council to construct a second waterworks main was defeated by a large majority.

OWEN SOUND, ONT.—Efforts are being made to form a joint stock company to build a modern skating rink to cost between $12,000 and $15,000.—The by-law to grant a loan of $25,000 to Keenan Bros. to assist them in extending their woodenware factory was carried by a large majority.

PETERBORO, ONT.—J. F. Howard, of Montreal, is forming a company to establish in this city a plant for the manufacture of stoves and radiators. It is to be known as the Dominion Stove & Heater Company and will have a capital of $500,000.—A by-law to provide $25,000 for fire protection has been sanctioned by the ratepayers.

WELLANDPORT, ONT. — James A. Ross, of this place, will apply to Parliament for the incorporation of a company to build an electric railway from Port Maitland, on Lake Erie, to Beamsville, on Lake Ontario. Others interested are S. D. Lake, of St. Catharines, and George Arnold, of Ridgeville.

OTTAWA, ONT.—John Henderson, City Clerk, will receive tenders up to Wednesday, January 10th, for the foundation and cement block work and carpenter and joiner work, also alternate tenders for brick work with cement block trimming, for the erection of a Fat Stock Show building. Plans at office of Northwood & Noffke, architects, 26 Central Chambers.

AROOSTOOK JUNCTION, N.B.—The stock of the Maine & New Brunswick Electric Power Company is meeting with satisfactory sale, and the promoters expect to be in a position to commence operations at an early date. E. H. Mather, of the Portland Lighting & Power Company, Portland, Maine, is one of the promoters.

ST. CATHARINES, ONT. — The Niagara, St. Catharines & Toronto Railway Company are seeking authority to make the following extensions: From Thorold to Port Colborne, Fort Erie to Niagara Falls, from Niagara Falls to Niagara-on-the-Lake, from Niagara Falls, Thorold, or Welland to Brantford, from St. Catharines to Niagara-on-the Lake.

MONTREAL, QUE. — W. L. Chipchase has purchased the property at 655-659 Craig street, near Bleury, and intends erecting a new building thereon in the spring of 1907. Plans for same are now being prepared by John James Browne & Sons.—Johnson & Copping have purchased No. 2494 St. Catherine street and intends making alterations to the premises.

HAMILTON, ONT. — The Eagle Spinning Mills Company will erect a large plant in this city.—Charles Mills, architect, has prepared plans for a one-storey addition, 76 × 230 feet, to the Hamilton Cotton Company's mills.—Geo. Hill intends erecting a five-storey storage building on Vine street, near James.—By-law was carried here on Monday to raise $20,000 to build a storm water sewerage system and $35,000 to complete the hospital improvements.

AMHERST, N.S. — The Maritime Coal Company, of which David Mitchell is manager, have under consideration the construction of an electric power plant at their mines with a view to transmitting electric energy to this town. The details are now being worked out by an electrical engineer and the carrying out of the project will depend upon the extent to which the manufacturers will contract for power.

ST. BONIFACE, MAN.—Bernier & Bernier, solicitors, acting for the town, are applying to the legislature for permission to issue debentures to the amount of $100,000.—Marchand & Haskell, architects, Montreal and Winnipeg, are asking for tenders up to January 15th for the erection of new Roman Catholic cathedral here. It will be of buff Tyndall limestone, 300 x 100 feet, with high towers, seating capacity 2,400. The organ and altars are not included in the specifications.

FREDERICTON, N.B.—The City Council will immediately invite tenders for sewer pipe and supplies for the proposed sewerage system.—C. H. LaBillois, Commissioner of Public Works, will receive tenders up to Monday, 8th inst., for repairing the Baltimore bridge in parish of Canning, and up to Monday, 15th inst, for repairing Goodwell bridge at Dawsonville, Restigouche county, and building a new bridge at Palmer's Mill pond, parish of Dorchester.—Interior alterations are to be made to the post office here.—The Roman Catholics intend erecting a new church in the near future.

ST. JOHN, N.B.—D. R. Jack is having plans prepared for a large brick structure to be erected on Union street, between the London House and No. 3 engine house. For the present it is intended to build only one storey, but the walls will be made of sufficient strength to carry additional stories when required.—The sum of $17,000 has been subscribed, in addition to the site, for the new Y.M.C.A. building, and it is proposed to commence operations in the spring. L. P. D. Tilley and W. H. Trueman are members of the committee.—Among the improvements to be undertaken by the C.P.R. the coming year will be the building of several bridges in this province and the enlargement of roundhouses.

WINNIPEG, MAN.—The plans for the Canadian Northern Railway station in this city have been received at the offices here from Toronto. They call for a combined station and hotel, to be built on the site of the present C.N.R. depot.—The Railway Commissioners at Ottawa have authorized the C.P.R. to construct a subway at Rachel street.—W. Muscovich, 77 Martha street, wants tenders for construction of baker's oven.—C. J. Brown, City Clerk, will receive tenders up to January 22nd for supply of one turbine pump, with electric motor, for the city waterworks.—A movement is on foot in civic circles to build an additional crematory.

VANCOUVER, B.C. — Parr & Fee, architects, are asking for tenders by noon of January 6th for a three-storey

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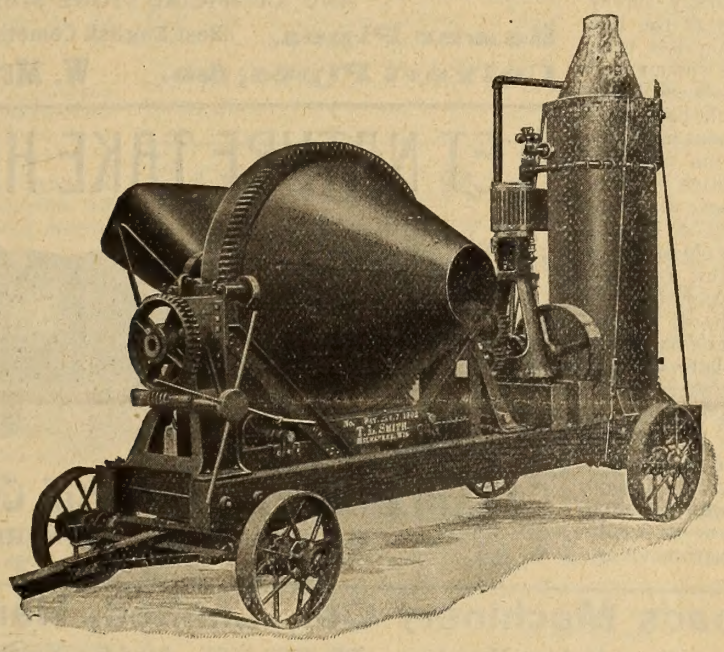

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MONTREAL

brick building to be erected on Hastings street. — Preparations for the construction of the mill of the Oriental Pulp, Paper and Power Company at Swanson Bay are now proceeding and the work will likely be commenced by April next. J. M. Mackinnon is the resident manager of the company. — Dalton & Eveleigh, architects, have prepared plans for a fine block to be erected on Pender street, between Homer and Hamilton streets. It will contain a large ball room, bowling alleys and up-to-date cafes and grill rooms. The ground floor will be divided into three stores. The building is to be erected for W. Ackland Hood, an English capitalist, and is estimated to cost $45,000.—Colonel W. Dickey proposes to establish a plant for the manufacture of sand-lime brick, at an estimated cost of $40,000.—The City Council are asking for tenders for an asphalt pavement on Nelson street, from Granville street to Stanley park, and wood block pavement on Seymour and Richard streets, between Hastings and Pender streets.—J. J. Tracy, engineer in charge of the Great Northern Railway survey party, states that the survey of the line from Midway to Hope, B.C., has been completed and work will be commenced immediately on the route between Hope and Chilliwack.—Dr. Carroll has made application to the Government for water rights to be taken out of the Capilano above the Canyon, his intention being to erect a dam 200 feet high above the water end. — Capitalists interested in railway enterprises on the coast are planning an electric railway between this city and Portland, Oregon.—An eastern capitalist, represented by Richards & Akroyd, has purchased the Canadian Bank of Commerce building and later on may erect a new structure on the site.

TORONTO, ONT.—The Grand Jury, in its presentment before Judge Winchesterlast week, recommended that a new asylum be erected to replace the present buildings on Queen street west, and that a training school for nurses be established. — The Ontario Government are considering the erection of an addition to the Parliament buildings in this city.—York Township Council still have $40,000 of debentures for sale, none of the tenders recently submitted having been accepted. — The College of Physicians and Surgeons have appointed a committee to secure a suitable site and arrange for plans for a new building to be used solely as the headquarters of the college.—In addition to the buildings now under construction in connection with the University of Toronto, plans have been prepared for a new building for the department of physics to cost about $225,000. The project for men's residences will likely take tangible shape this year, as plans are now being prepared for four dwellings to be erected on the corner of Hoskin ave. and Devonshire place, to cost about $50,000 each. In connection with the department of botany it is proposed to erect plant houses costing approximately $10,000, and to provide space for the display of the collections in the departments of mineralogy and geology, President Loudon says that a wing will probably be added to the new chemistry and mining building on College street.—Building permits have been granted as follows: Mrs. I. Wilson, 2½-storey brick dwelling, Emerson avenue,cost $3,000; A. Pennock, 2½-storey brick dwelling, Bellwoods avenue, near Robinson st., cost $2,500; A. Pennock, 2½-storey brick dwelling, Gore Vale avenue, near Queen st., cost $2,500; J. B. Andrew, 2½-storey brick dwelling, Jameson avenue, near King st., cost $6,000; W. Clark, 2-storey brick veneered

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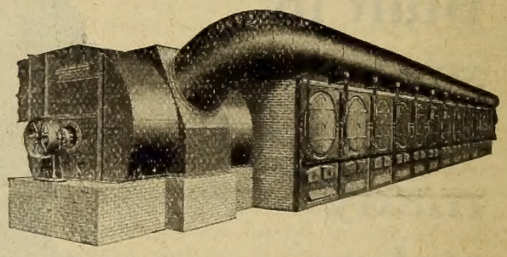

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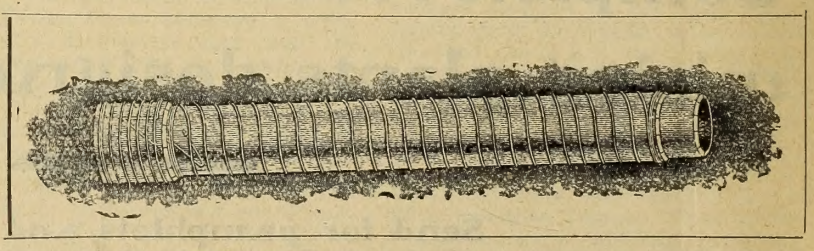

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dwelling, Sheridan avenue, near Dundas st., cost $1,800; B. H. Moorehouse, two-storey and attic brick dwelling, First avenue, cost $2,400; A. A. Mitchell, pair 2½-storey brick dwellings, Woodlawn avenue, cost $5,600; Mrs. I. Williams, two-storey stone and brick dwelling, 305 Hamburg avenue, cost $2,000; Reid & Brown, two-storey frame and iron clad carpenter shop, No. 63 Esplanade st. east, cost $2,000; Knox church, two-storey brick Sunday school building and brick and stone church, Spadina avenue, near Harbord st., cost $170,000; T. Gingras, pair 2½-storey roughcast dwellings, brick foundation, 71 73 Euclid avenue, cost $2,500; Consumers' Gas Co., 1-storey and basement brick and steel purifying house, corner of Booth and Eastern avenue, cost $50,000; Dunnet & Young, 2-storey brick, stone and roughcast dwelling, No. 416 St. Clarens avenue, cost $1,200; J. E. Hambley, 2-storey brick and roughcast dwelling, Montrose avenue, near Bloor st., cost $1,500.

CONTRACTS AWARDED.

WINNIPEG, MAN.—George W. Murray has secured the contract for the interior hardwood finish for new C. P. R. hotel.

OTTAWA, ONT.—Thomas P. Charleson of this city, has been awarded the contract to build a wharf at Shippegan, N.B., at a cost of $16,000.

EDMONTON, ALTA. — Smith & Sharpe, of Winnipeg, have secured the contract for erection of Canadian Northern Railway freight sheds here.

PORTAGE LA PRAIRIE, MAN.—The Council have disposed of $25,000 of 20-year 5 per cent. debentures to the Canadian Securities Company, at 104⅝.

CALGARY, N. W. T.—Three tenders were received for erection of the South Ward school building, as follows: J. C. McNeill, $72,975; British Columbia Contract Company, $66,200; D. J. McLaughlin, Wetaskiwin, $60,650 (accepted).

BROCKVILLE, ONT.—The James Smart Manufacturing Company, this place, have been awarded the contract of heating and ventilating the R. C. church at St. Pie de Guire, Que., using three "Kelsey" generators.

FREDERICTON, N.B.—The following bids were received for construction of sewerage system: J. B. McManus, Ltd., Memramcook, N. B., $42,013; George Bryne, Boston, $52,460; Bruno & McKenzie, Boston, $53.327; Gow & Palmer, Boston, $53,822; Williard Kitchen, Fredericton, $58,012; Brown Bros., Fredericton, $58,708; Mooney & Sons, St. John, $60,995; Reid McManus, Memramcook, $74,165. The contract has been awarded to J. B. McManus, Ltd., of Memramcook, N.B. F.A. Barbour, of Snow & Barbour, Boston, has been appointed engineer in charge.

FIRES.

Commercial Hotel and Massey-Harris warehouse at Whitewood, Sask., totally destroyed; loss $8,000.— Woodworking establishment of Hicks & Company, Bridgetown, N. S.—W. R. Knowles' mill for manufacturing grindstones at Clifton, N. B.; loss $5,000.—Coal sheds of the International Portland Cement Company, Hull, Que.; loss $8,000, covered by insurance.—Building on Richmond street west, Toronto, occupied by the Oxford University Press; loss $30,000.—Crystal Block at Buckingham, Que., owned by F. M. Gorman, totally destroyed; loss $9,000. Pickering College at Pickering, Ont., totally destroyed; loss $30,000.—No. 2 cottage at Mimico Asylum, Mimico, Ont.; loss $15,000.

NEW COMPANIES.

New Liskeard Rink Company, Limited, New Liskeard, Ont., incorporated, capital $10,000, to build and operate skating, hockey and curling rinks, Directors, W. A. Taylor, Charles A. Binkley and others.

Silver Bar Mining Company, Limited, Ottawa, Ont., incorporated, capital $500,000. Directors, W. D. Gregory, H. F. Gooderham, of Toronto, and others.

Cormack Cobalt-Silver Mining Company, of Toronto, Limited, incorporated, capital $500,000. Directors, R. L. McCormick,

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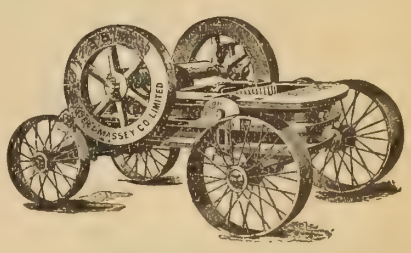

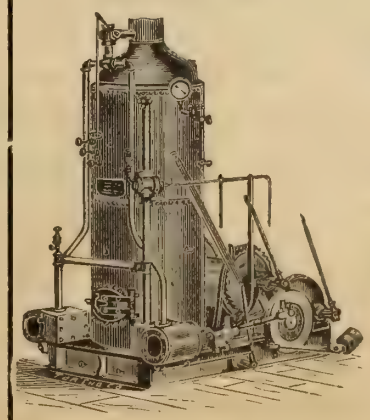

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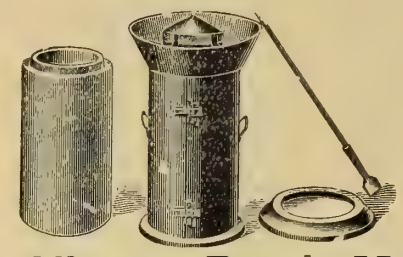

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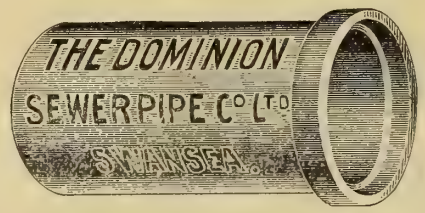

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By H. B. R. Craig, A. M. Can. Soc. C.E.

In dealing with this subject, the writer proposes to describe an asphalt plant operated by the city of Kingston for the past twelve years.

This plant occupies a space of half an acre in one of the corporation yards, but at the same time, should much asphalt work be done in any district of the city far away from the said yard, the entire plant may be advantageously moved to a convenient place in that locality. A covered shed, 30 by 20 feet, serves as a protection to the plant proper, and the remaining space is used for storing the stock of asphalt, tar, and fuel, and for tarring the broken stone.

The plant consists of an asphalt boiler of 40 gallons capacity, a sand-heater with a surface of 100 square feet, and a mixing board of about the same size. The sand-heater is simply a sheet iron-plate, half an inch thick, resting on four brick walls two feet high and one foot wide enclosing an oven. The fuel is fed to the oven through a hole in one of the walls. The initial cost of the plant was $105.00.

In operating this plant the daily pay roll amounts to $12.74, and itemized is as follows:—

* Read before the Canadian Society of Civil Engineers, Montreal.

(Continued on page 10.)

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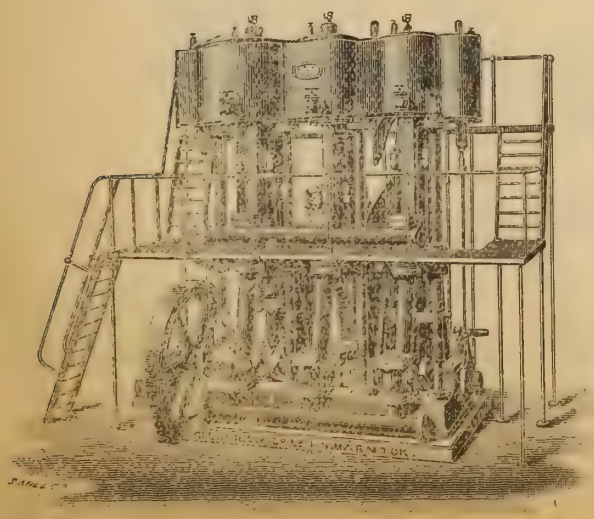

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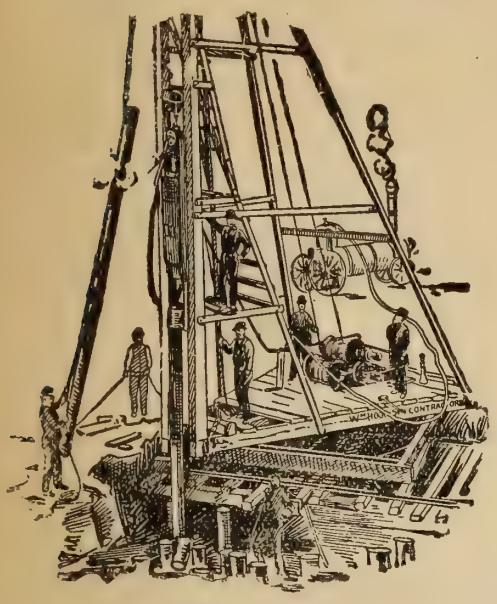

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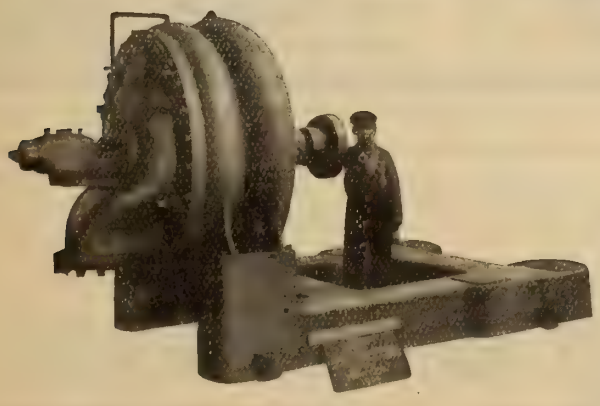

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There is no charge made for superintendence, as the foreman of streets attends to that.

The cost of the various materials is as follows:—

Asphalt	1.57 cents per pound.
Sand	90.0 cents per cubic yard.
Cement	170.0 cents per 350-lb. barrel.
Gravel	75.0 cents per cubic yard.
Tar	1.0 cent per pound.

The daily output of the above force is about 300 square feet of finished crossing or walk.

The following statement shows in detail the cost of laying 5,000 square feet of asphalt crossings during the year 1905.

Material.	Cost in cts. per sq.ft.
Stone	0.267
Asphalt	3.690
Cement	0.080
Fuel	0.110
Hardware	0.015
Tarred Gravel	0.510
	5.302

Labour	Cost in cts. per sq.ft.
Boiling asphalt and heating sand	1.25
Carting	1.088
Laying and finishing surface	0.917
Preparing foundation	1.020
	4.275
Total cost per sq. foot of crossing	9.577

It will be noticed that the charge for fuel is very small. That is due to the fact that the fuel is obtained from the old plank walks which were torn up when being replaced by new walks. The only charge, therefore, is that of cartage. The cost of crossings is less than that of walks, as the expense of preparing the foundation is a little more with the latter than with the former, and more tarred gravel is required in the case of the walks to give the surface mixture a firm base.

The manner of construction of the asphalt crossings is as follows:—

SURFACE MIXTURE.

(a) 270 pounds of Acme asphalt are heated to 300 degrees Fahrenheit and kept at that temperature for about two hours, being constantly stirred.

(b) 20 bushels of medium coarse sand, screened of all material ⅛ of an inch and over, are then heated to drive off the moisture.

(c) The asphalt and sand are then thoroughly mixed by hand on the mixing board.

LAYING ON MACADAM ROADWAYS.

A furrow is picked up along the edge of the crossing so as to produce the desired camber and to prevent the wheels of vehicles from cutting into the asphalt. A load or two of tarred gravel in addition to this may be required along the length of the crossing.

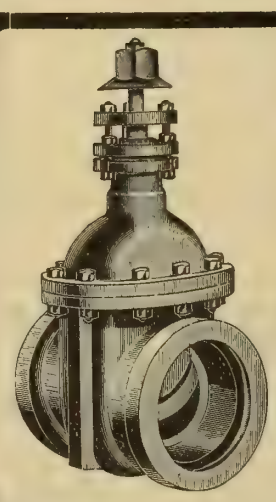
The asphalt surface mixture is then laid on the foundation as prepared to a depth of two inches. It is then well tamped and pounded along the edges and thoroughly rolled with a two-man roller. The surface of the roller and pounder are first well oiled so as to prevent the mixture from adhering to them. A thin coat of cement is then sprinkled over the wearing surface and wetted down, about one pound of cement being required for every ten square feet of crossing.

Asphalt walks are constructed in a similar manner, with the exception of the foundation course. The ground is cleared of all loose material and graded to a firm even base, cinders well sprinkled and tamped being used to bring the walk to the required elevation. On the cinders is placed a 4-inch layer of tarred gravel. This course is then pounded to give a firm even bearing for the surface mixture, which is then laid as before.

On a heavily travelled street with the roadway abutting the walk, a concrete curb of the usual design is built in place along the outer edge of the walk. Wherever feasible, however, the usual custom is to arch the outside edge of the walk and tamp it well into a small furrow. In this way an almost vertical face may be produced. Limestone screenings may then be placed along this edge for backing. A 1 × 10 inch form properly braced is placed along the inside edge of the walk before construction and is usually left there.

A method sometimes used for the outside face is a 2 × 10 inch form braced by means of 4-inch cedar posts placed every six feet on the walk side of the form and driven one foot into the ground. This is not to be recommended, as the posts will eventually be heaved up by the action of the frost, thus destroying the wearing surface, and the form soon rots out.

The life of the asphalt crossings is found to vary from ten to twenty years. This together with such a low initial cost renders them vastly preferable to plank crossings and even to many of the more expensive crossings, such as those built of concrete, brick, or stone. For example there are several crossings built of asphalt in Kingston which have outlasted the surfaces of heavy concrete crossings of the same age and two or three times the initial cost. Another point in favor of asphalt for both crossings and walks is its elasticity, which when not too great is very desirable.



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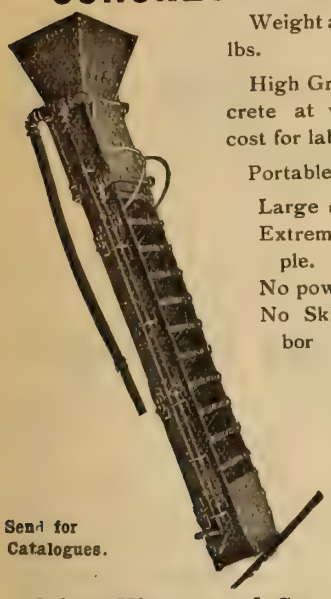

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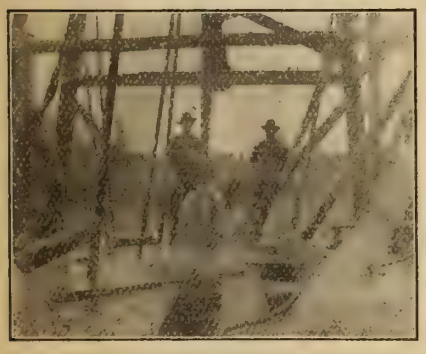

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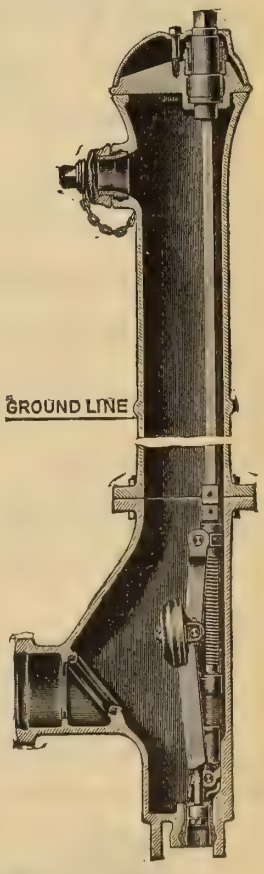

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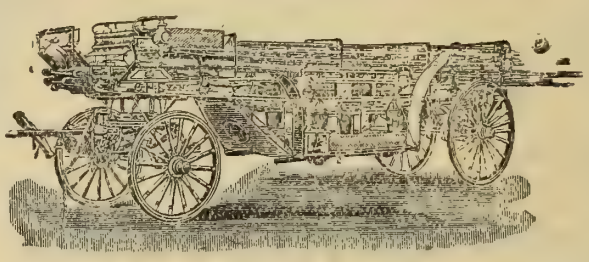

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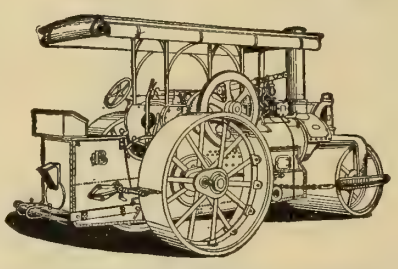

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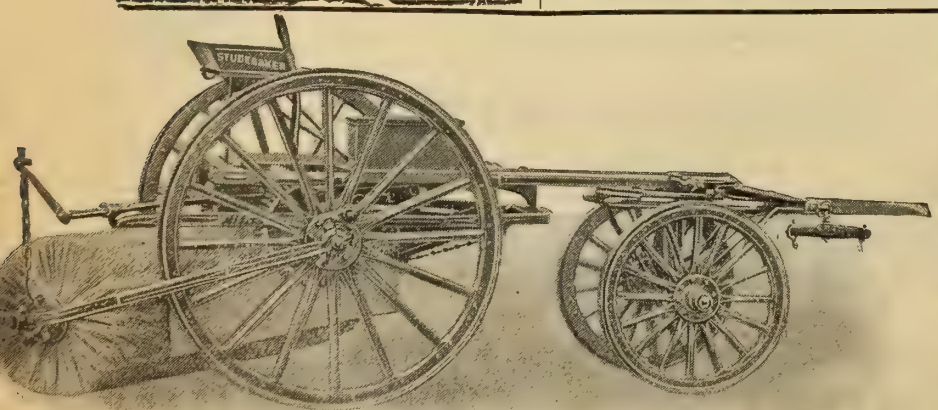

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Because no sweeper so effectually does the work for which it is designed as "The Studebaker." It Sweeps Clean. No sweeper is constructed with the same degree of care and mechanical precision. It Wears Well. "The Studebaker" has the smallest number of working parts, and has less gearing than any other sweeper made: It is free from all unnecessary complications. With reasonable care it does not get out of order. Send for complete descriptive catalogue.

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Does not clog or get out of order. Greatest width of spray Can be graded from driver's seat to any volume.

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Our Waggoner extension and other fire ladders are reinforced with steel wire trussing making them at once the **Strongest** and the **Lightest**, as they are the **Cheapest** Firemen's ladders in the market. They are also the **Quickest** operated, a matter of vital moment in firefighting.

Our safety lock is the **Safest** and simplest produced. **Clerks, Councils** and **Fire-Chiefs**, write for circular, &c.

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PORTLAND CEMENT

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Capacity 11,000 Barrels Per Day.

Capacity in 1906 will be 20,000 Barrels per day.
The Lehigh Company are now erecting a plant at Belleville, Ontario, of 4,000 barrels per day capacity. For prices, etc., address—

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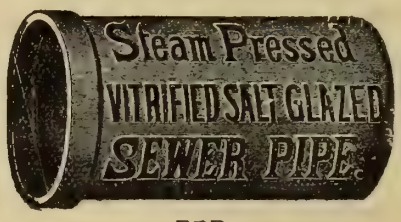

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"ALSENS—ALWAYS."

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The Isthmain Canal Commission wisely demanded a SPECIAL QUALITY Cement for the Panama contact let May, 1905. The sea water clause, while necessary to INSURE THE WORK, was undoubtedly severe. One of the largest American Companies tied the bid of Alsen's. The Government awarded the contract to Am. Aslen's in PREFERENCE, at EQUAL FIGURES. The bids ARE ON RECORD at Washington. Alsen's product has always been recognized as of HIGHER AVERAGE quality than ANY other brand. It is ultra high grade and a more PRACTICALLY PORTLAND. It has become known as the "absolutely safe cement."
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A Cement which matures slowly is stronger ultimately, but we gladly furnish quick setting when specified

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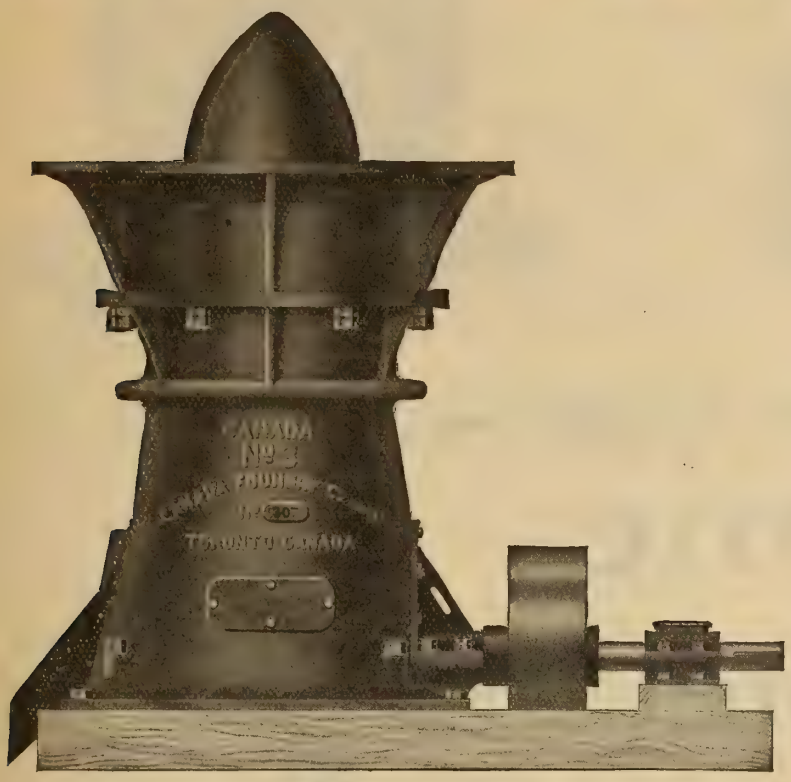

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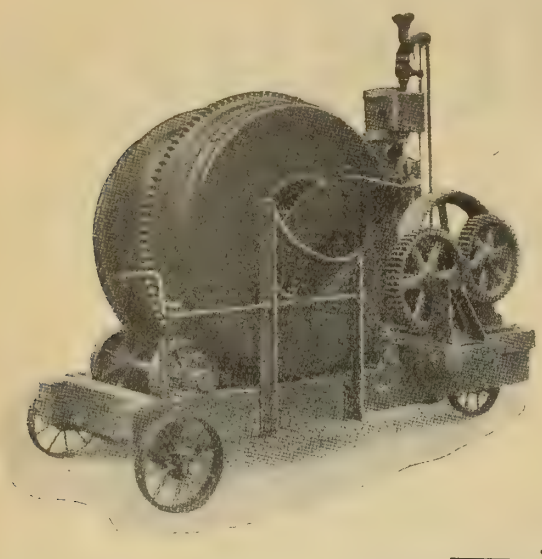

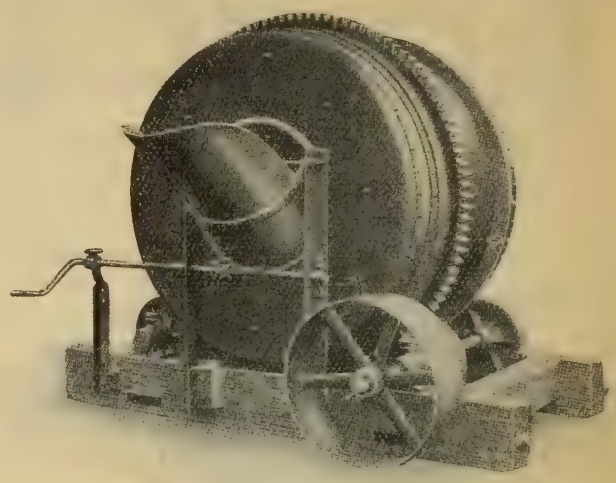

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Ransome Concrete Mixer

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We are offering what is, without any manner of doubt, the very best mixing machine to be had to-day.

A machine that is distinctly different from all others. It is the simplest machine on the market, there is not one unnecessary part to afford opportunity for wear. Ransome Mixers mix concrete or mortar with equal efficiency. They mix speedily and at low cost, as they save one handling of concrete and the whole batch or part of same can be discharged into wheelbarrows without delaying mixing operation.

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Easy to Operate

Saving in Labor, Time and Cost

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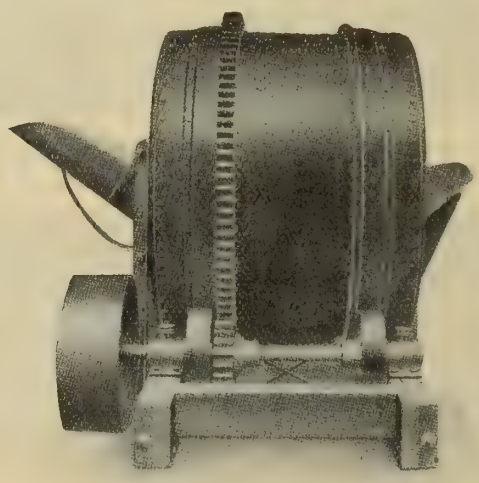

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Contract Record

A Weekly Journal of Public Works, Tenders, Advance Information and Municipal Progress

This Paper Reaches Every Week the Town and City Clerks, Town and City Engineers, County Clerks and County Engineers, Purchasers of Municipal Debentures and Leading Contractors in All Lines Throughout Canada

VOL. 16. TORONTO, MONTREAL — JANUARY 10, 1906 — WINNIPEG, VANCOUVER No. 45

THE CANADIAN CONTRACT RECORD
PUBLISHED EVERY WEDNESDAY
As an Intermediate Edition of the Canadian Architect and Builder.

THE C. H. MORTIMER PUBLISHING COMPANY
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CARD

The undersigned, having a certain amount of time at his disposal, invites employment.

W. FRASER, Quantity Surveyor,
142 Grace Street, Toronto.

Tenders For Bridge

Tenders, addressed to James Coxford, Esq., Chairman of Committee, Pembroke, Ont., and marked Tenders for Bridge, will be received up to two o'clock in the afternoon of MONDAY, 22ND DAY OF JANUARY, 1906, for the construction of a Steel Bridge with Stone foundations across the Madawaska River in the Township of McNab (near Arnprior,) in the County of Renfrew.

Plans and specifications may be seen at the offices of James H. Smith, County Engineer, Pembroke, and John Brennen, Esq., Councillor, Sand Point.

TENDERS
For Supply of Turbine Pump

Mailed tenders addressed to Ald. J. C. Gibson, Chairman Fire, Water and Light Committee, for supply of one turbine pump with electric motor, for the city waterworks, will be received at the office of the undersigned up to 3.30 p. m. on

MONDAY, JANUARY 22, 1906.

Specifications and forms of tender may be obtained at the office of Col. H. N. Ruttan, City Engineer, Winnipeg, Manitoba.

Each tender must be accompanied by an accepted cheque or draft payable to the order of the city treasurer, or cash deposit for the sum called for in the form of tender supplied, which will be subject to forfeiture in case of failure on the part of the contractor to enter into a written contract with approved sureties if called upon to do so.

The city reserves the right to reject any or all tenders, or to accept any bid which appears advantageous to the City of Winnipeg.

C. J BROWN,
City Clerk

City Clerk's Office,
Winnipeg, Dec. 27, 1905.

To Contractors

Tenders will be received by the undersigned up to 12 o'clock noon MONDAY, JANUARY 29TH, 1906, for the construction of a tunnel at Eugenia Falls, Grey County, Ontario. Plans and specifications may be seen at the Company's Office, 16 King St. West, Toronto.

The lowest or any tender not necessarily accepted.

GEORGIAN BAY POWER CO. LIMITED.

FOR SALE

The Corporation of the Town of Parry Sound, Ontario, will receive sealed tenders at the office of E. E. Armstrong, Town Clerk, up to and including the 13TH DAY OF JANUARY, 1906, for the following Electrical Apparatus : One direct connected 450 k.w. 60 cycle 2080 v 3-phase revolving field Alternator, also one direct connected Exciter suitable for the above machine, together with switchboard all complete, f.o.b. power house, Parry Sound.

Bids will also be received for water wheels suitable to drive the above machine either connected to the present wheels or not, as may be most suitable. For information re. water wheels, address

G. GROVES, Box 422,
Parry Sound, Ont.

Specification of Electrical Apparatus may be seen at the office of the Town Clerk.

CITY OF FREDERICTON

NOTICE TO BIDDERS FOR IRON PIPE

Sealed bids will be received at the City Clerk's office, Fredericton, N.B., until four o'clock in the afternoon on Monday, the twenty-second day of January instant, for furnishing and delivering to the city 480 feet of cast iron fourteen (14) inch pipe and specials.

Complete Specifications and form of Contract on application to the undersigned.

The city reserves the right to reject any or all bids or to accept any bid.

J. W. McCREADY,
City Clerk.

Fredericton, N.B., Jan. 3rd, 1906.

CITY OF FREDERICTON

NOTICE TO BIDDERS FOR SEWER PIPE

Sealed bids will be received at the City Clerk's office, Fredericton, N.B , until four o'clock on the afternoon of Monday, the twenty-second day of January instant, for furnishing and delivering the city with vitrified glazed Sewer pipe, including approximately the following quantities : 5 inch pipe, 2,900 feet ; 6 nch pipe, 3,200 feet ; 8 inch pipe, 48,000 feet ; ten inch pipe, 2,200 feet ; 12 inch pipe, 1,900 feet ; 15 inch pipe, 2,600 feet ; 18 inch pipe, 3,200 feet, and specials.

Complete Specifications and form of Contract on application to the undersigned.

Each Bid must be accompanied by a certified bank cheque for $250 and a bond for $2,000 will be required for performance of contract.

The city reserves the right to reject any or all bids or to accept any bid.

J. W. McCREADY,
City Clerk.

Fredericton, N.B., Jan. 3rd, 1906.

CITY OF FREDERICTON

Notice to Bidders for
Manhole Frames, Etc.

Sealed bids will be received at the City Clerk' office, Fredericton, N.B., until four o'clock in the afternoon of Monday, the 22nd of January instant, for furnishing and delivering to the city 282 Manhole Frames and Covers and 1,200 Manhole Steps.

Complete plans, specifications, bidding paper and form of Contract may be had on application to the undersigned.

The city reserves the right to reject any or all bids or to accept any bid.

J. W. McCREADY,
City Clerk.

Fredericton, N.B., Jan. 4, 1906.

CONTRACTS OPEN.

CARMAN, MAN.—A new town hall is needed.

HAMSTEAD, ONT. — Mr. Dewar intends building a new residence.

KEW BEACH, ONT.—The Methodists will shortly erect a church on Bellfair avenue.

ALMONTE, ONT.—John Illingworth has purchased a lot on which he intends building a store.

MOOSOMIN, ASSA. — The Council are now considering the construction of a waterworks system.

ST. THOMAS, ONT. — David H. Palmer will build a cement block residence, at a cost of $1,400.

NIAGARA FALLS, ONT.—M. H. Buckley will build two houses on corner of Ontario ave. and Park street.

GUELPH, ONT.—The electors voted down the proposition to expend $30,000 for waterworks filtration system.

ROSSER, MAN.—A scheme is being formulated for the purpose of draining certain lands in this municipality.

GRAND HARBOR, N.B.—It is reported that Newton Brothers, of Grand Manan, will build a large store here.

GLACE BAY, N.S.—The Town Engineer has submitted an estimate of $75,000 for proposed waterworks construction.

PRINCE ALBERT, SASK.—G. M. Foster will receive tenders up to 16th inst. for building school house at Shellbrook.

MORRISTON, ONT.—The trustees of School Section No. 8 have decided to build a new school house to cost about $5,000.

GALT, ONT.—The MacGregor-Gourlay Company will erect a new foundry if they can dispose of their present premises.

DUNDAS, ONT. — The by-law to raise $16,500 for a new High school

building was defeated by a large majority.

MONCTON, N.B.—The Town Council are making application to the Legislature for permission to issue $80,000 of debentures.

WINCHESTER, ONT. — The Molsons Bank, which owns the electric light plant here, contemplates, making important changes.

FERGUS, ONT.—The Fergus Electric Light & Power Company purpose remodelling their plant and installing new machinery.

PICKERING, ONT.—The authorities of the Pickering College will take steps immediately towards the erection of a new college building.

ARNPRIOR, ONT.—Plans are now being prepared for the buildings to be erected here by the Montreal Suspender & Umbrella Company.

STURGEON FALLS, ONT.—A by-law granting exemption from taxation to the Northern Sulphite Company to build a new mill here was defeated last week.

MOOSE JAW, ASSA.—The Methodists will build a $35,000 church.—W. A. Elliott, architect, of Brandon, is preparing plans for new Methodist church here.

ST. ANDREWS, N. B.—Plans are being formulated for extending the business of the New Brunswick Iron Company and to erect a large smelting plant at Lepreaux.

QUEBEC, QUE. — J. H. Walsh, general manager of the Quebec Central Railway, states that it is the intention of the company to build several branch lines this year.

EGLINTON, ONT. —Mrs. Pratt has bought a lot on south side of Balliol street, near Yonge street, with the intention of erecting three or four houses in the early spring.

NANAIMO, B.C.—Parr & Fee, architects, of Vancouver, have prepared plans for extensive alterations and improvements to the Green block recently purchased by A. Fox.

LONDON, ONT. — The Imperial Bank have purchased the property on the south-east corner of King and Richmond streets and will remodel the building for bank purposes.

MORRIS, MAN.—T. M. Ure, Clerk of the Rural Municipality of Morris, will receive tenders up to January 26th for grading to be done this year. About $8,000 is to be expended.

CHARLOTTETOWN, P.E.I.—L. B. McMillan, Secretary of Public Works, will receive tenders up to Thursday, 18th inst., for the rebuilding of Belle River bridge in Queens county.

REGINA, SASK.—J. K. Hunter, Secretary-Treasurer, will receive applications up to Saturday, February 3rd, for the position of city engineer and surveyor; salary, $2,000 per annum.

NIAGARA, ONT.—Alfred Ball will receive tenders up to 25th inst. for erection of a building for the Niagara Historical Society. Plans by W. B. Allan, architect, St. Catharines.

CALGARY, ALTA.—J. S. Dennis, of the C. P. R., states that the extensive irrigation system which the company have commenced east of this city will be continued during the coming season.

PALMERSTON, ONT.—A by-law was carried here on January 1st to raise $35,000 for a waterworks system, in accordance with plans and estimates prepared by John Galt, C.E., Toronto.

BELLEVILLE, ONT. — The ratepayers have agreed to grant exemption from taxation to the Lehigh Portland Cement Company, of Allentown, Pa., who propose establishing new cement works here.

OWEN SOUND, ONT. — The promoters of the Huron and Ontario Electric Railway Company state that the construction of the road will be begun in the spring. Their office is in the Confederation Life building, Toronto.

MOYIE, B.C.—The East Kootenay Power & Light Company, of which Charles MacKay is president, have decided to engage Clemens Herschel, hydraulic engineer, of New York, to report on their proposed power development.

KINGSTON, ONT. — The by-laws to assist the Kingston Locomotive Works and to issue debentures for building a trunk sewer were carried on January 1st, but the exemption by-laws in respect to hosiery mill and tannery were defeated.

FORT FRANCIS, ONT. — Z. A. Lash, of Toronto, has made application for the incorporation of a company to construct a railway and traffic bridge across the Rainy river near this place. It is believed to be a Mackenzie & Mann scheme.

EAST TORONTO, ONT.—W. R. Meade, architect, expects to ask for tenders within a fortnight for the new High school building.—The Bell Telephone Company have purchased property on Lee avenue and intend erecting a modern central office in the spring.

WOODSTOCK, ONT.—The special committe of the Collegiate Institute Board appointed to report on increased accommodation, will recommend an addition and certain alterations to the present building, including a new heating system, the whole to cost between $15,000 and $20,000.

ST. JOHN, N. B.—The city council will place on the market $207,000 of bonds.—Alex. Wilson is forming a company to enlarge the McLaughlin boiler shop. — The Mowry Safety Nut Lock Company intend erecting a large nut and bolt factory, at a probable cost of $150,000.

ST. CATHARINES, ONT. — H. H. Collier, solicitor for the Buffalo, Niagara & Toronto Railway, says that building operations will commence early in the spring. The line will run from Niagara-on-the-Lake to Buffalo, through St. Davids and Bridgeburg, with a branch to St. Catharines and Welland.

CHILLIWACK, B.C.—The Government intend building a four-roomed public school building here.—The E. C. Horst Company will make large additions to their present equipment for curing hops. They will erect eight new concrete kilns and a large store house, equipped with steam heating.

SASKATOON, ASSA.—A. R. Campbell, of Moose Jaw, is making an estimate of the cost of installing waterworks, sewerage and electric light systems.—The National Trust Company have had plans prepared for a handsome block to be built on the property recently purchased on corner of Second ave. and Twentieth street.

VANCOUVER, B.C. — It is understood that plans for a new building for the Canadian Bank of Commerce in this city are being prepared by Darling & Pearson, architects, Toronto.—At a public meeting held in the City Hall last week, a proposal was endorsed to raise $100,000 for the purchase of the necessary land and erection thereon of market buildings.

HALIFAX, N. S. — The Chronicle Publishing Company have bought property at the corner of Prince and Granville streets and propose to erect a modern newspaper office thereon next spring.—The parishioners of St. Lukes parish have decided to comibne with the Cathedral committee for the erection of a Cathedral church in this city.

HAMILTON, ONT. — Dr. Robertson, Medical Health Officer, urges the erection of a new Isolation Hospital.—W. H. Northcott will build a $1,800 brick house on Hess street, between Bold and Hunter streets, and Wark & Laurence will build a $1,700 house on Steven street.—John Lennox, of John Lennox & Company, has purchased property on George street, opposite Van Allen's shirt factory, and will likely build thereon.

TORONTO JUNCTION, ONT. — The following building permits have recently been granted: T. A. Fleming, stone and brick dwelling, Louisa street, cost $1,700; J. L. Bemrose, stone and brick dwelling, Western ave., cost $2,500; E. E. Rutterford, two dwellings, Maria street, cost $1,200 each.—In his inaugural address the Mayor recommends the construction of a permanent pavement on Dundas street.

EDMONTON, ALTA.—At a meeting of the city council held on January 2nd, representives of the C.P.R. submitted an outline of proposed plans for the building of a high level bridge from Strathcona, to cost upwards of $1,000,000. The erection of a union depot was also considered.—The Edmonton Lumber Company, Limited, of which W. H. Clark is manager, have acquired ten acres of land for their proposed mill and yards.

FREDERICTON, N.B.—The Department of Public Works are taking tenders for rebuilding the Scott bridge over the Milkish stream, in Kings county.—J. W McCready, city clerk, will receive tenders on behalf of the corporation up to Monday, 22nd inst., for supply of 282 manhole frames and covers and 1,200 manhole steps, 480 feet of 14 inch cast iron pipe and specials, and a quantity of 5 6, 8, 10, 12, 15, and 18 inch vitrified glazed sewer pipe.

FORT WILLIAM, ONT. — It is expected that the C.P.R. will build a new station here this year.—The coming building season promises to be quite active here. The Empire Elevator Company are announced to build another elevator or an addition to the present one, while the Ogilvie Company will enlarge their elevator. Gigantic freight sheds are to be built by the C.P.R.—By-laws were carried here last week to raise $20,000 for waterworks improvements, $14,000 for electric light extension, and $12,000 for telephone improvements, also to grant exemption from taxation to Whalen & Bowman to build a dry dock and machine shops.

MONTREAL, QUE.—The Canadian Pacific Railway Company will shortly commence the enlargement of the Windsor street station, the necessay land for that purpose having been acquired.—L. O. Grothe & Company, cigar munufacturers, have purchased the land at corner of St. Lawrence Main, Ontario and St. Charles Borommee streets and intend erecting a large block thereon, comprising a factory and five stores. The factory will consist of five stories on Ontario street and four on St. Lawrence street. The plans are being prepared by J. B. Resther & Son, architects, and it is expected that building operations will commence about April 1st.

OTTAWA, ONT.—Tenders will be invited about the end of this month for the construction of 244 miles of the Grand Trunk Pacific Railway from Winnipeg to the junction with the Lake Superior branch.—The architect of the Public School Board will prepare plans for a new ten-roomed school and for an addition to the Creighton street school.

Is your present equipment going to be sufficient for the coming season?

If you anticipate the need of anything in

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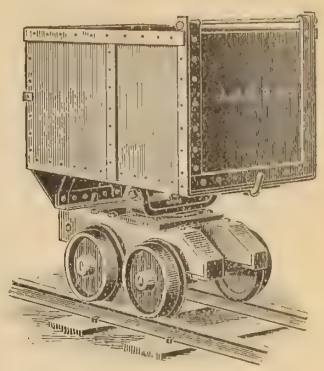

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WIRE ROPE
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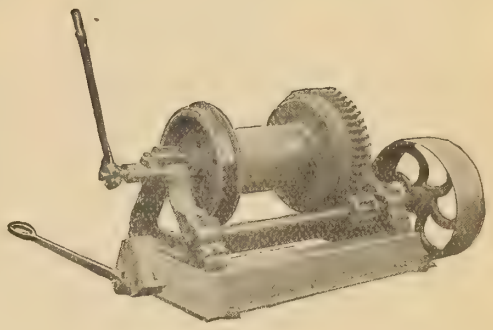

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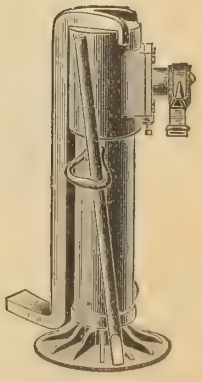

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MONTREAL

—It is understood that during next summer extensive improvements will be made to the Government conservatories both on Parliament Hill and Major's Hill Park, including the erection of a large palm house.

TORONTO, ONT. — The Home Bank have completed arrangements for the immediate erection of a bank building on the north-east corner of Queen and Bathurst streets.—Among the expenditures which will be considered by the Board of Education this year are the following: High school over the Don, cost $100,000; High school in northern part of the city, $100,000; Technical school, $110,000; new public school in northwest part of city, $60,000.—Building permits have been granted as follows: George T. Denison, two-storey stone and brick store, Avenue road, near Dupont street, cost $1,500; John Kilgour, two-storey roughcast dwelling, 192 Hallam street, cost $1,400; B. H. Moorehouse, two-storey and attic brick dwelling, Smith street, near Logan avenue, cost $2,400; Ossington Avenue Baptist Church, one-storey brick and stone church, corner Bloor and Ossington avenue, cost $10,000; H. H. Halls, two-storey brick and stucco building on Boustead avenue, near Indian road, cost $2,500; Charles A. Grant, pair two-storey and attic stone and brick dwellings, George street, near Queen, cost $4,800; John Laughlin, two-storey brick and roughcast dwelling, Claremont street, cost $1,600; E. Hamilton, two-storey and attic brick roughcast and frame dwelling, Clarens avenue, near Bloor street, cost $1,800; N. H. Brady, two-storey brick dwelling, Conduit street, cost $2,000; King Bros., three pair two-storey brick dwellings, College street, near Margueretta street, cost $12,000.—Tenders are invited by the Georgian Bay Power Company, 16 King street west, up to 29th inst., for construction of a tunnel at Eugenia Falls. —Alderman Oliver has given notice of motion in the City Council that a new pavilion be erected in Allan Gardens, at a cost not exceeding $50,000, also that the Don improvement scheme be carried out.

WINNIPEG, MAN. — S. Hooper, provincial architect, is preparing plans for a new provincial gaol to be erected near the Agricultural College grounds, at an estimated cost of $110,000.—A local capitalist has purchased the lot on north-west corner of Logan avenue and Elm street and intends erecting thereon a five-storey building to be used as a temperance hotel. J. A. Gaynor, of the Winnipeg Estate & Loan Company, made the sale.—It is reported that plans have been prepared for the erection of a new hotel on the Main street property purchased last summer by Willlam Lyall. —Darling & Pearson, architects, Toronto and Winnipeg, are preparing plans for the Imperial Bank building to be built in this city.—The Credit Foncier Franco-Canadian have purchased the property adjoining the Bank of Ottawa on east side of Main street and will erect a large building in the spring.—F. C. Bell is building a warehouse on south side of Portage avenue, near Victoria street, from plans by Herbert Matthews, architect. The foundation walls are completed and the superstructure will be commenced in the early spring.—The C.P.R. are planning for extensive operations next season. On the line which will connect Wetaskiwin and Saskatoon it is proposed to construct 200 miles, and an additional 150 miles will be built east from Saskatoon. The line from Moose Jaw will be extended 28 miles north.—The congregation of the Church of the Cross have purchased a site on corner o

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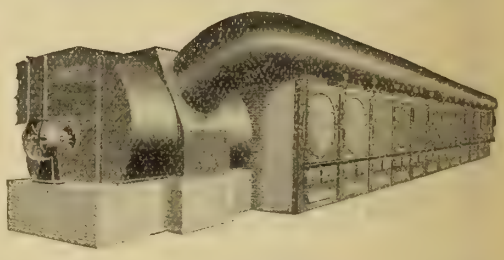

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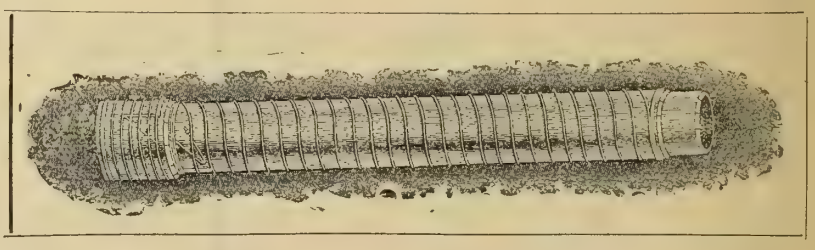

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500 " " " " " " " " " 4″ × 20 × 12 "

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Alexander avenue and Chambers street on which to build a church at an early date. Rev. George Gehrke is pastor.—William Whyte, vice-president of the C.P.R., has made the announcement that the construction of another trunk line from Winnipeg to Edmonton will be commenced at once. The construction work to be done by the C. P. R. this year is estimated to cost $6,000,000.—Work will shortly be commenced on the buildings for the high pressure waterworks system.—The City Council are asking for tenders for the supply of two electric generators for the high pressure pumping station on James street east.

FIRES.

St. Paul's Indian Industrial school in parish of Middlechurch, nine miles from Winnipeg, totally destroyed; loss $25,000.—Manitoba Hotel at Portage la Prairie, Man., owned by Mrs. Haggarty; loss $10,000.—Block at High River, Alta., occupied by Hyslop, Young & Kelly, hardware and furniture merchants, and the adjoining general store of A. W. H. Thompson; loss $60,000.—Saw and shingle mill at Lakefield, Ont., owned by the White Company, completely destroyed.—Industrial school building at Mimico, Ont., damaged to extent of $12,000.

CONTRACTS AWARDED.

PORT MOODY, B. C.—The contract for pile driving for J. S. Emerson's saw mills at this place has been let to Ironside, Rannie & Campbell, of Vancouver.

REGINA, SASK.—The tender of J. W. Ney, of this place, has been accepted for purchase of $25,000 of debentures of municipality of Moncalm; price $25,768.

EDMONTON, ALTA.—Thomas Page has been awarded the contract for new Immigration hall to be constructed on First street, cost about $10,000. It will be 21 × 60 feet, two stories and basement, foundation of concrete and superstructure of frame.

VANCOUVER, B.C.—Contracts for waterworks supplies for this year have been awarded as follows: Lead pipe, Robertson, Godson & Company, $5.10 per 100 lbs.; brass work, Canadian Fairbanks Company, $1,238.60; galvanized pipe and fittings, Canadian Fairbanks Company, $1,960.70.

The following tenders were received for purchase of debentures: A. H. Dickens, representing Bank of Ottawa, $31,375 for $30,000; L. A. Hamilton, representing Bank of Commerce, 1.04½ for $25,000; W. C. Brent, Toronto, $26,159 for $25,000; E. P. Garland, representing Canadian Securities Company, 1.04⅝ for $25,000 (accepted).

BUSINESS NOTES.

The assets of J. P. Heroux, sash and door manufacturer, Sorel, Que., are to be sold.

F. H. Barwick has been admitted as a partner in George W. Reed & Company, roofers, etc., Montreal.

The death is announced of Pierre Begin, of the firm of Patterson & Company, contractors and divers, Quebec.

Loucks & Finnimore, painters, Winnipeg, Man., have dissolved, and the business will be continued by H.E. Finnimore.

H. C. Harshaw has been appointed Superintendent of Construction on the Toronto-Sudbury branch of the C. P. R.

John Stocks, late Deputy Commissioner of Public Works for the Northwest Territories and Chief Engineer of Irrigation, has been appointed Chief Engineer of Irrigation for the provinces of Alberta and Saskatchewan.

The Hanover Portland Cement Company, Hanover, Ont., are about to make extensive alterations to their plant and have placed the contract for machinery with the Owen Sound Iron Works Company.

BUILDING IN MONTREAL.

Building operations in Montreal during the year just ended represented a total value of $5,590,698. These figures are shown by the annual report of the building inspector, Mr. A. Chausse.

The cost of new structures erected or in course of erection in the city amounted to $4,779,38c, the repairs and alterations for which permits were issued aggregating $811,318.

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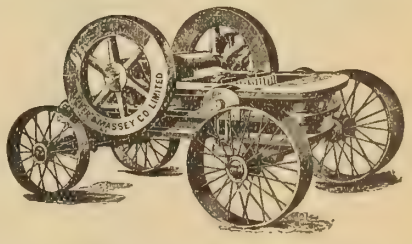

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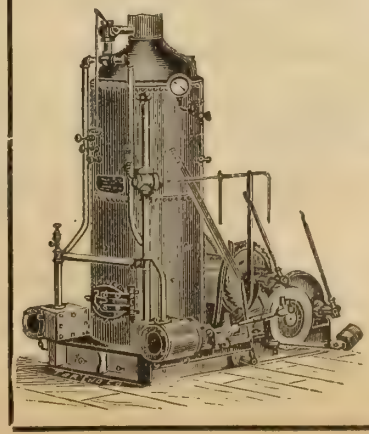

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and other Contractors' Machinery.

NEW COMPANIES.

Intensified Light & Super-Soda Company, Limited, Toronto, incorporated, capital $100,000, to carry on the business of mechanical engineers, machinists and foundrymen. Directors, James Morrison, manufacturer, W. B. Russell, civil engineer, and others.

Canadian Printers, Limited, St. Catharines, Ont., incorporated, capital $40,000. Directors, W.D. Woodruff, J. A. Keyes, and others.

Rex Tailoring Company, Limited, Toronto, incorporated, capital $40,000, to manufacture clothing, tailors' materials, etc. Directors, A. A. Southby, M.H.Van Valkenburg and Richard Schofield.

Couchiching Hotel Company, Limited, Fort Frances, Ont., incorporated, capital $40,000, to carry on a summer resort, build hotels, etc. Directors, Michael McCulloch, W. J. Keating and R.V.H.Keating.

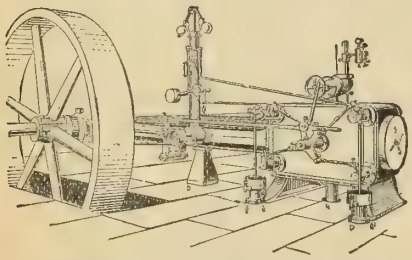
Spanish Mills Company, Limited, Spanish Mills, Ont., incorporated, capital $100,000, to carry on a general saw-milling business. Directors, B. W. Arnold and A. S. Girvin, of Albany, N.Y., W. J. Bell, of Sudbury, and others.

S.H. White Company, Limited, Sussex, N.B., incorporated, capital $298,000, to carry on a general lumber business. Directors, S. H. White, W.J.Mills and H. P. Robinson, of Sussex, John E.Moore, of St. John, and others.

Excelsior Babbitt & Car Bearing Company, Limited, Moncton, N. B., incorporated, capital $100,000. Promoters, J. R. Stratton, R. A. Borden, of Moncton, and others.

Grand Manan Telephone Company, Limited, Grand Manan, N.B., incorporated, capital $2,000. George A. Dazell, Frank Ingersoll, and others.

Home Paper Box Company, St. Stephen,



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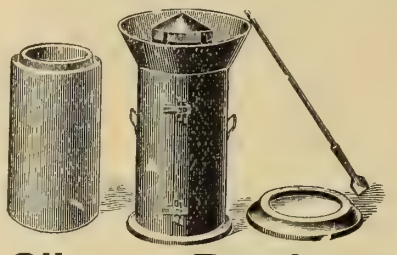

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N. B., incorporated, capital $5,000. G.W. Ganong, A. D. Ganong, M. L. Robinson and W. S. Murray, of St. Stephen, and H. L. McPhail, of Boston.

Vermilion River Iron Ore Company, Limited, Toronto, incorporated, capital $80,000. Directors, Frank Denton, J. W. McDonald and E. A. Francis.

Thorold Natural Gas Company, Limited, Toronto, incorporated, capital $40,000. Directors, C. A. Moss, Wm. Gilchrist and J. A. Thompson.

C. Parsons & Son, Limited, Toronto, incorporated, capital $150,000, to carry on the business of tanners, etc. Directors, Charles Parsons, John E. Boswell and others.

Wendigo Progressive Mining and Development Company, Limited, New Liskeard, Ont. incorporated, capital $40,000 Directors, John Cox, S. Eplett, G. W. Slade, J. W. Foreman and John McFarlane.

Dymond Development Company, Limited, Ottawa, Ont., incorporated, capital $250,000. Directors, C. W. F. Gorrell, A. T. Shillington, and others.

Terrill Cobalt Mining Company, Limited, Sault Ste. Marie, Ont., incorporated, capital $100,000. Directors, W. E. Gimby, George Woolrich, and others.

Siche Gas Company, Limited, Toronto, incorporated, capital $1,00,000, to manufacture gas apparatus and supplies. Directors, F.L.H. Sims, J. H. Chewett and R. G. Hunter.

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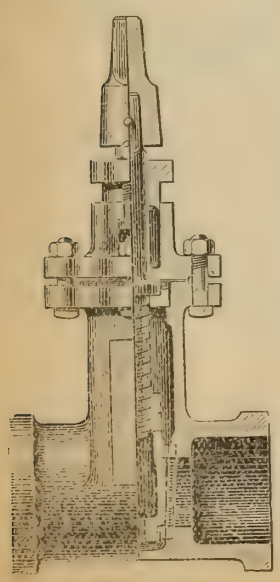
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							Neat.					3 (Sand) to 1 (Cement)				
					Initial	Final	1 dy.	7 dys.	28 dys	3 mos.	1 yr	1 dy	7 dys.	28 dys.	3 mos.	1 yr.
1903	20	O.K.	3.135	2.1	162	345	307	701	783	827	*	74	214	299	367	*
1904	44	O.K.	3.150	2.0	132	342	300	744	848	914	938	86	262	354	401	427

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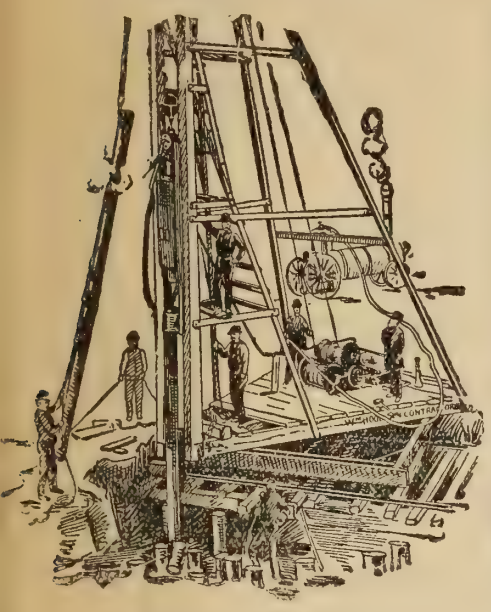

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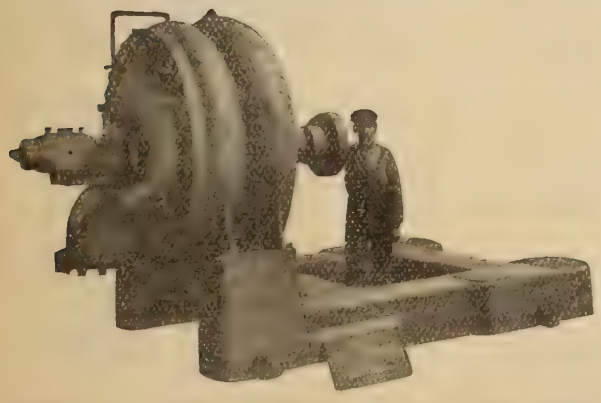

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MUNICIPAL IMPROVEMENTS IN WINNIPEG.

The year 1905 has been a record-breaker for municipal improvements in Winnipeg. In all departments of the civic work the progress made has been highly satisfactory and the works attempted and accompolished have been on a larger scale than in any former year.

The following is a statement of the quantity of work done in 1905 by the city works department and also of the work accompolished previous to this year, together with the total amount now completed:

	1905. Miles.	Previous to 1905. Miles.	Total Miles.
Asphalt	5.716	17¼	22.966
Macadam	2.339	33	35.339
Cedar block	2.212	16	18.212
Stonewalks	14.503	22¾	15.253
Plankwalks	30.429	190	220.429
Sewers	24.492	84	108.492
Water mains	28.305	95	123.305
New grading	11.538	138	149.538

The following is a statement of the work already ordered by council, but not yet done, together with the estimated cost:

	Miles.	Estimated Cost.
Asphalt pavement	19.035	$946,898
Macadam pavement	1.210	23,393
Cedar block	3.952	51,411
Stonewalks	12.220	100,870
Plankwalks	4.801	10,994
Sewers	15.684	215,900
Water mains	5.046	70,000
New grading	3.523	1,772
Total estimated cost		$1,421,238

CHARGES FOR LOCAL IMPROVEMENTS.

In the following table the charges to the ratepayers for local improvements are shown:

Plank Walks—Four feet wide, 6c. per foot frontage for seven years. Five and one-third feet wide, 8c. per foot frontage for seven years. Six feet wide, 8½c. per foot frontage for seven years.

Granolithic Walks—Six feet wide, 7c. per foot frontage per year for thirty years. With stone curb, 16c. per foot frontage per year for thirty years.

Asphalt Pavements—Twenty-four feet wide, 33c. per foot frontage per year for twenty years. Twenty-four feet wide, 26 c. per foot frontage for thirty years.

Boulevards—Average cost per year for seven years, 4c. per foot frontage.

Macadam Pavements — Twenty-four feet wide, 10c. to 12c. per foot frontage per year for ten years.

Cedar Block Pavements—Twenty-four feet wide, 20c. per foot frontage per year for seven years.

Sewers—Cost $2 per foot frontage, which is equal to 18c. per foot per year for fifteen years.

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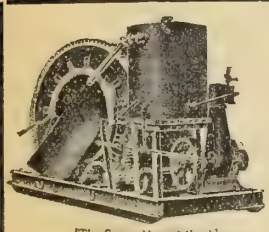
The Steam Heated Batch

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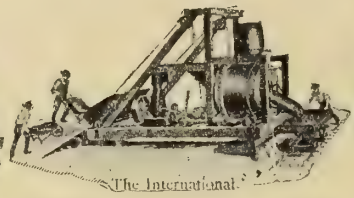
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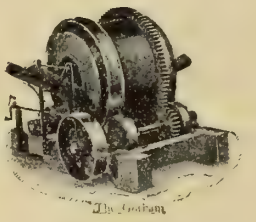
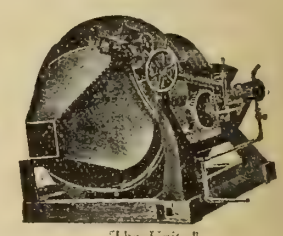

The Graham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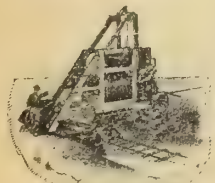
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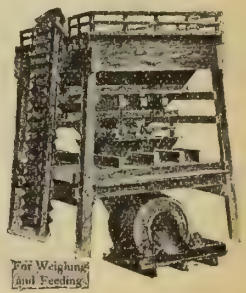
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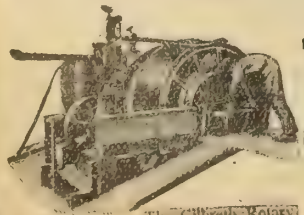
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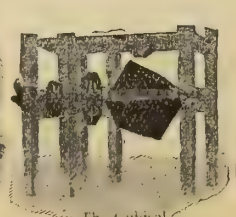
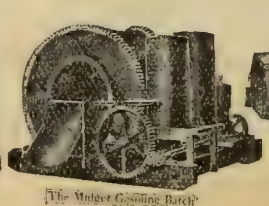

The Cubical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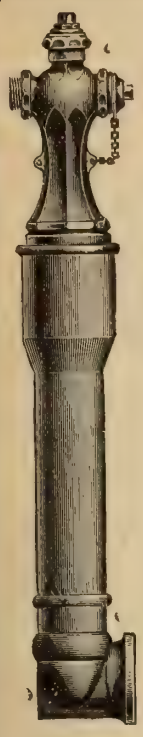

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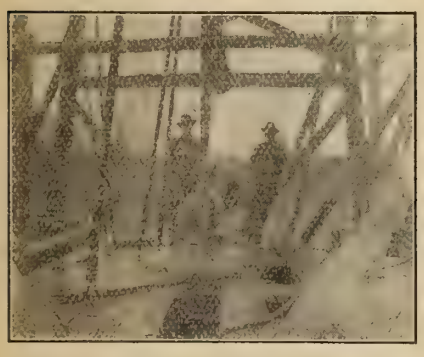

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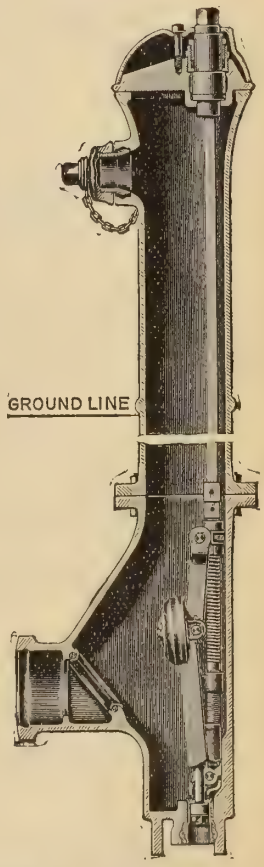

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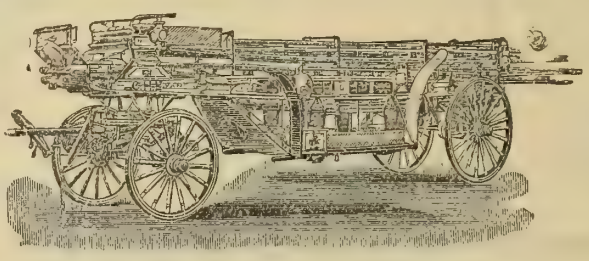

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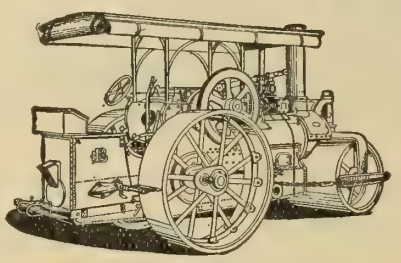

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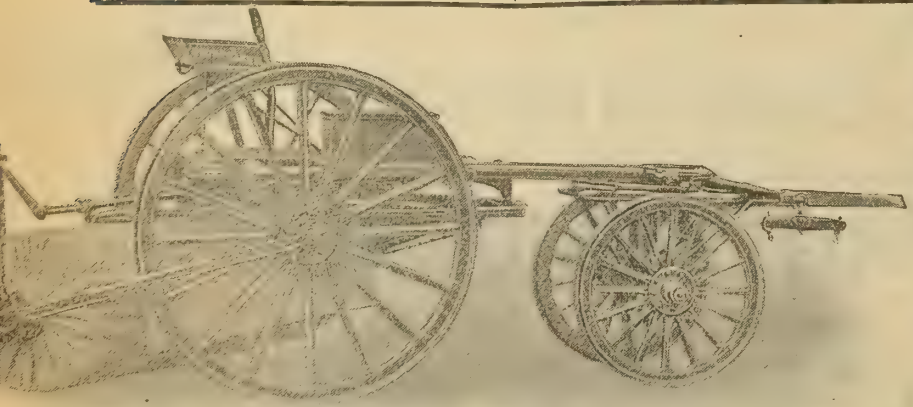

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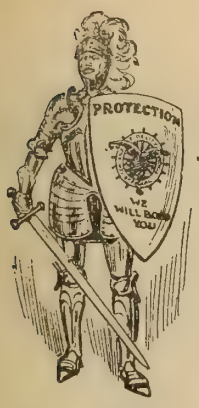

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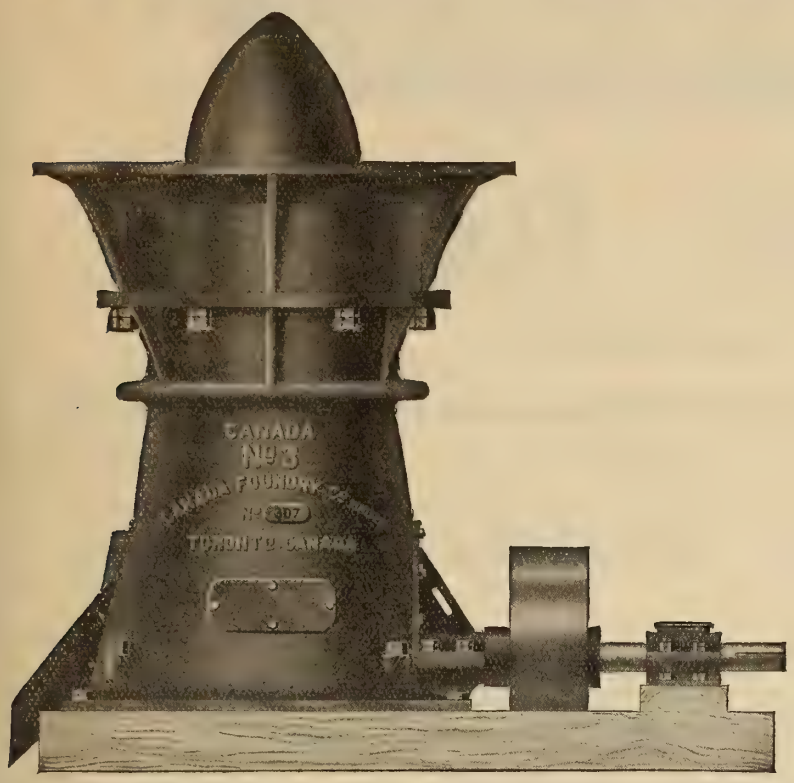

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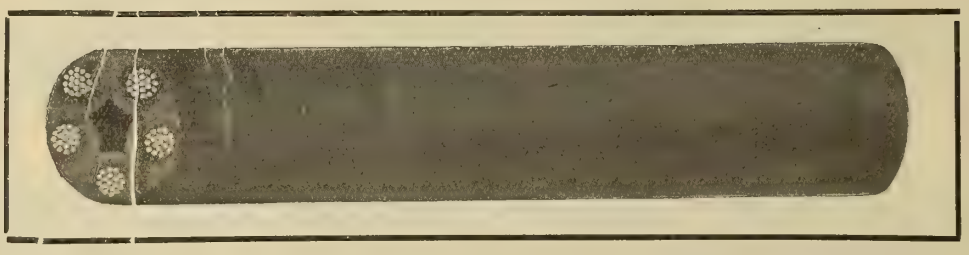

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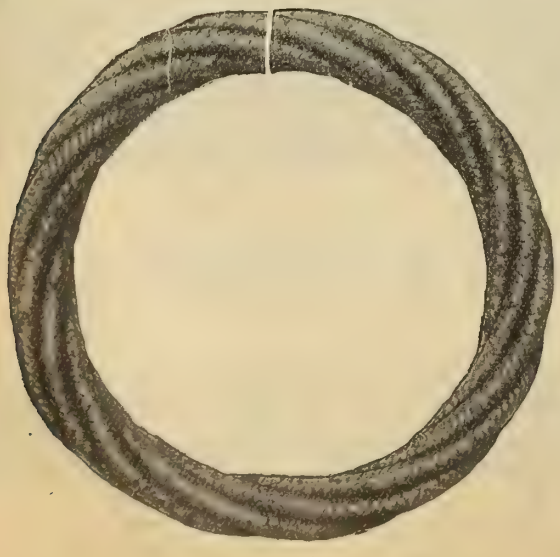

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CANADIAN

Contract Record

A Weekly Journal of Public Works, Tenders, Advance Information and Municipal Progress

This Paper Reaches Every Week the Town and City Clerks, Town and City Engineers, County Clerks and County Engineers, Purchasers of Municipal Debentures and Leading Contractors In All Lines Throughout Canada

VOL. 16. TORONTO, MONTREAL — JANUARY 17, 1906 — WINNIPEG, VANCOUVER No. 46

THE CANADIAN CONTRACT RECORD

PUBLISHED EVERY WEDNESDAY

As an Intermediate Edition of the Canadian Architect and Builder.

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of Toronto, Limited,

Subscription Price, $2 per annum, payable in advance.

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CARD

The undersigned, having a certain amount of time at his disposal, invites employment.

W. FRASER, Quantity Surveyor,
142 Grace Street, Toronto.

Tenders For Bridge

Tenders, addressed to James Coxford, Esq., Chairman of Committee, Pembroke, Ont., and marked Tenders for Bridge, will be received up to two o'clock in the afternoon of MONDAY, 22ND DAY OF JANUARY, 1906, for the construction of a Steel Bridge with Stone foundations across the Madawaska River in the Township of McNab (near Arnprior,) in the County of Renfrew.

Plans and specifications may be seen at the offices of James H. Smith, County Engineer, Pembroke, and John Brennen, Esq., Councillor, Sand Point.

TENDERS

For Street Lamps and Transformers

Sealed tenders addressed to Alderman J. C. Gibson, Chairman Fire, Water and Light Committee, will be received at the office of the undersigned up to 3.30 p. m. on MONDAY, FEBRUARY 12TH, 1906, for the following supplies for street lighting system for the City of Winnipeg, namely:

100 to 200 Series Alt. Arc Lamps.
100 to 200 Absolute Cut-outs.
2 or 4 Constant Current Transformers.

Specifications and forms of tender may be obtained on application to F. A. Cambridge, City Electrician, Winnipeg, Can.

Each separate tender must be accompanied by an accepted cheque or draft (payable to the order of the City Treasurer) or cash deposit for an amount equal to 5 per cent. of the tender, which will be subject to forfeiture in case of failure on the part of the contractors to enter into a written contract with approved sureties when called upon to do so.

The city reserves the right to reject any or all tenders, or to accept any bid which appears advantageous to the City of Winnipeg.

C. J. BROWN,
City Clerk.

City Clerk's Office,
Winnipeg, Jan. 11, 1906.

To Contractors

Tenders will be received by the undersigned up to 12 o'clock noon MONDAY, JANUARY 29TH, 1906, for the construction of a tunnel at Eugenia Falls, Grey County, Ontario. Plans and specifications may be seen at the Company's Office, 16 King St. West, Toronto.

The lowest or any tender not necessarily accepted.

GEORGIAN BAY POWER CO. LIMITED.

The City of Regina

CITY ENGINEER

The undersigned will receive applications up till SATURDAY, FEBRUARY 3RD, 1906, for the position of City Engineer and Surveyor for the City of Regina, at a salary of $2000.00 per annum.

J. KELSO HUNTER,
Sec'y-Treas.

Regina, Sask., Jan. 3rd, 1906.

CORPORATION OF THE TOWN OF PORTAGE LA PRAIRIE

Engineer Wanted

Applications for the position of Resident Engineer of the Town of Portage la Prairie will be received up to FEBRUARY 2ND, 1906. Duties to commence on April 1st.

By order,

F. A. WHITAKER,
Town Clerk.

Portage la Prairie, Jan. 9th, 1906.

TENDERS FOR ELECTRIC GENERATORS

Sealed tenders addressed to Alderman J. C. Gibson, Chairman Fire, Water and Light Committee, for supply of two 500 H. P. Electric Generators, will be received at the office of the undersigned up to 3.30 p. m. on MONDAY, FEBRUARY 12TH, 1906.

Specifications and forms of tenders may be obtained on application to H. N. Ruttan, City Engineer, Winnipeg, Canada.

Each tender must be accompanied by an accepted cheque or draft payable to the order of the City Treasurer, or cash deposit for the sum called for in the form of tender supplied, which will be subject to forfeiture in case of failure on the part of the contractor to enter into a written contract, with approved sureties, if called upon to do so.

The city reserves the right to reject any or all tenders or to accept any bid which appears advantageous to the City of Winnipeg.

C. J. BROWN,
City Clerk.

City Clerk's Office,
Winnipeg, Jan. 10, 1906.

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WANTED

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To Contractors

Tenders will be received at the office of the undersigned until 5 p. m., WEDNESDAY, JANUARY 24TH, for the various works required in the erection of a

SYNAGOGUE

in University ave. for the Goel T-Zedec Congregation. The lowest or any tender not necessarily accepted.

SYMONS & RAE, Architects,
15 Toronto Street, Toronto.

CITY OF EDMONTON, ALBERTA

Tenders are invited for electric light and telephone poles as follows, viz:

100—40 ft. 9 in. and over at small end.
600—35 ft. 8 in. and over at small end.
200—30 ft. 8 in. and over at small end.

Poles to be straight and sound and peeled.

Tenders to state kind of timber tendered on.

Price to be F.O.B. Edmonton delivered in March and following months as may be required.

Tenders to be delivered to the undersigned not later than WEDNESDAY, 31ST INST. Any further information will be given on application to J.H. Hargreaves, Public Works Commissioner.

GEO. J. KINNAIRD,
Secretary-Treasurer.

Edmonton, Jan. 9, 1906.

CONTRACTS OPEN.

HIGH RIVER, ALTA. — Dr. Richards will build a new residence.

ELMWOOD, MAN. — Subscriptions are being collected for a new German Lutheran church.

WIARTON, ONT. — A septic tank may be constructed in connection with the sewerage system.

WESTMOUNT, QUE.—There is an agitation in favor of securing a more efficient water supply.

AMHERSTBURG, ONT.—W.A. Wanless is having plans prepared for enlarging the Patton property.

SAULT STE. MARIE, ONT.—The sum of $30,000 has been voted for a site and the erection of a new High school.

LACOMBE, ALTA.—The Blindman Power Company have submitted a proposition for the electric lighting of the town.

PILOT MOUND, MAN.—Tenders are invited by E. F. Stedman up to January 25th for erection of school building.

NEW WESTMINSTER, B. C. — Mayor Keary is in favor of building a new hospital to replace the Royal Columbian.

ARTHUR, ONT.—E. Allan desires tenders by 22nd inst. for heating the High school with steam. Plans at office of R. T. Smith.

KAMLOOPS, B.C.—A by-law will be submitted to the ratepayers on January 18th to raise $25,000 for the erection of a school building.

DUTTON, ONT.—Bids are invited by J. D. Blue, Village Clerk, up to 29th inst. for purchase of $4,000 ten year 4 per cent. debentures.

FORT ERIE, ONT.—The Ferry Company have had plans prepared for a two storey customs and ticket office.

ST. CATHARINES, ONT. — Alderman Hodgins will shortly submit to the City Council a proposal for building a new central fire station.

MEAFORD, ONT.—Davis & Johnston, of Berlin, have submitted a report on a system of sewerage for this town; estimated cost, $9,600.

FORT WILLIAM, ONT.—A. McNaughton will receive tenders up to 25th inst. for supply of 200 forty-foot and 100 forty-five-foot poles.

GLACE BAY, N.S.—The Dominion Coal Company will shortly commence the erection of a large hotel and boarding house at Reserve Mines.

OWEN SOUND, ONT.—At a meeting of the Board of Trade last week, the question of purchasing a new fire engine for the town was discussed.

CLINTON, ONT.—The Council have pronounced in favor of a system of waterworks and a public meeting will be held this month to consider the matter.

THOROLD, ONT.—The Board of Trade are in favor of amalgamating with St. Catharines and Merritton with a view to securing a system of waterworks.

LONDESBORO, ONT. — Hullett Township Council will likely construct two bridges over the Maitland river this year, at estimated cost of $5,000 each.

CANNING, N.S.—Sir Frederick Borden has purchased a site in the centre of of the town for the purpose of building a new customs house and public building.

DUNNVILLE, ONT.—A by-law will likely be submitted to the ratepayers to raise funds for a municipal gas plant. The gas will be piped from Wainfleet-field.

GRAND FALLS, N. B.—The Grand Falls Water Power Company have filed with the Provincial Government their plans for proposed power development here.

PRINCE ALBERT, SASK. — Willis Chipman, C.E., Toronto, has been asked to furnish an estimate of moving the electric light plant to the waterworks power house.

QU'APPELLE, ASSA.—Tenders are invited up to February 6th for erection of a school house. Plans at offices of William Dodd, architect, Regina and Calgary.

CHATHAM, ONT.—It is expected that at the coming session of the Legislature Hon. Dr. Reaume will ask for a substantial vote in aid of the drainage works in Kent county.

CALGARY, ALTA. — Father Lamarchand, parish priest in charge of St. Marys church, is going to France for the purpose of securing funds to build a Catholic college here.

GRETNA, MAN.—E. Rietze has had plans prepared for a new three-storey hotel, brick veneer on stone foundation. —The C. P. R. have decided to build a new passenger depot here.

MONCTON, N.B. — D. Pottinger, manager Intercolonial Railway, will receive tenders up to the 26th inst. for construction of additions to the station and freight shed at Norton, N.B.

TRURO, N.S.—A company of local capitalists have purchased the site of Gunn's building and purpose erecting thereon a three storey brick structure containing stores, lodge rooms, etc.

GUELPH, ONT.—The directors of the Guelph Street Railway are considering the extension of their road to Puslinch Lake and Hespler, a distance of about nine miles; probable cost $150,000.

TORONTO JUNCTION, ONT. — The Superintendent of Waterworks has been requested to report on the cost of extending the intake pipe and making other improvements to the waterworks system.

REGINA, SASK. — The building committee of the Methodist church have recommended that a new edifice be erected after the plan of a Brandon church. The cost will be about $45,000.

SMITH'S FALLS, ONT. — Mayor Foster, Dr. Gray and John McEwen are the promoters of a stove foundry to be erected here this year. The building will be of brick and will cost $15,000. The site has already been purchased.

AMHERST, N.S.—The proposal of the Maritime Coal & Railway Company to erect a large power station at their mines and transmit electric energy to Amherst, has been endorsed by the Board of Trade.

LONDON, ONT.—A special committee have asked the County Council to appropriate $9,000 for the purpose of improving the county roads.—Dr. John D. Wilson states that building operations on the proposed abattoir will likely be commenced in the spring.

BOISDALE, N.S.—Tenders are invited by the Department of Public Works, Ottawa, up to Thursday, February 8th, for the construction of a wharf here. Plans at offices of C. E. W. Dodwell, Halifax; E. G. Millege, Antigonish, and at the Intercolonial Railway station here.

EDMONTON, ALTA.—It is stated to be the intention of the Canadian Northern Railway to lay rails on the extensions graded in a westerly direction. One of these branches extends 25 miles west to the Spruce Grove settlement, and another 23 miles northwest to Mornville. A branch will also be built from Fort Saskatchewan to Strathcona.

COLLINGWOOD, ONT.—The Farrar Transportation Company have decided to build a 9,000 ton steamer. A. Farrar is president of the company.—The Imperial Wire & Nail Works have plans out for extensive additions to their plant.—The Collingwood Furniture Company purpose extending their premises this year.

NIAGARA FALLS, ONT.—Mayor Slater, in his inaugural address, outlined a scheme for waterworks improvement. He proposes joining with Niagara Falls, N.Y., for a plant and power house above Chippewa.—J. G. Cadham has acquired property on Palmer avenue for a company which purposes establishing silver plating and cutlery works.

VICTORIA, B.C. — Pemberton & Sons will shortly commence work on a brick and stone block on the corner of Broad and Broughton streets. — The Capital City Cannery Company will erect a cannery this spring, probably on Esquimalt Harbor. It is stated that Dr. Bell Irving, who has trap sites along the straits, will also erect a cannery.

PORT HOPE, ONT.—Power & Sons, Kingston, Ont., have been appointed architects for remodelling the present gaol as a house of refuge and the erection of a new gaol. The County Council propose to expend about $60,000 for this work.—H. T. Bush has been in correspondence with a firm which is considering the erection of a large factory in this town.

HAMILTON, ONT. — A. Elms has purchased the property at 84 Main street west, for building purposes.—It is reported that the International Harvester Company intend erecting another large addition to their factory.—A conference was held in the Mayor's office on Friday last to discuss a plan for the building of a public wharf and the improvement of the harbor at foot of Sherman avenue.—The Eagle Knitting Company have decided to build a new factory at corner of Wilson street and Sanford avenue.

PETERBORO, ONT. — At the last Council meeting the by-law was read providing for the borrowing of $25,000 for a new fire hall, fire alarm system, chemical engine, extension ladder, hose, etc. —Mayor Best has submitted to the City Council a proposition in respect to acquiring a water power on the east side of Otonabee river. — The paving of George will be taken up this year.—The Board of Education have instructed the Property Committee to make arrangements for land on which to build a new Collegiate Institute.

OTTAWA, ONT. — The question of constructing an overhead bridge over the various railway tracks which cross the Richmond road will shortly be brought up in Council.—Charles MacNab, County Clerk, will receive bids up to January 25th for purchase of $20,000 20 year 5 per cent. debentures.—The shareholders of the Victoria Yacht Club have decided to rebuild their club house immediately, at a probable cost of $7,000. D. E. Johnson is secretary-treasurer.—Tenders are invited by F. Gelinas, Secretary Department of Public Works, up to 20th inst., for the construction of metallic fittings for the Savings Bank branch of the post office.—Hon. A. B. Aylesworth has purchased the property known as "Linderlea" and will likely erect a residence thereon.

MONTREAL, QUE.—The Congregationalists of Point St. Charles have decided to build a new church. — The C.P.R. have decided to enlarge the Angus shops and will build two additions each 100 × 672 feet, costing in the neighborhood of $250,000.—Ground has been purchased on Dorchester street, near St. Timothee street, on which to erect a church for the Italians, at a probable cost of $75,000. Father Caramello will be in charge.—The National Trust Company, 153 St. James street, are advertising for a site for a warehouse.—Marchand & Haskell, architects, have preared plans for a large warehouse for the Terminal Warehouse & Cartage Company, to be located between Grey Nun and King streets, below Commons. The building will be six stories, 100 x 196 feet, brick, with metal windows and doors throughout, cost about $200,000.

VANCOUVER, B. C. — The Vancouver Ice & Cold Storage Company are planning to erect a four storey building on the east side of Gore avenue, south of the C. P. R. tracks. The plans are being prepared and work will likely be commenced in February. — The work of laying rails on the Vancouver, Victoria & Eastern Railway is expected to be commenced at Midway about May 1st.—J. A. Wells has purchased the Victoria Hotel on Homer street and will build a large addition extending to Pender street. A large Turkish bath equipment will also be installed, the whole to cost about $50,000. —Plans have been prepared for a three-storey brick block, 120 x 104 feet, to be erected on the corner of Pender and

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MONTREAL

Seymour streets for Robert Martin, J. P. Nicholls and D. Gavin.—The Standard Soap Company, of Calgary, will erect a large factory in this city. P. Burns is president of the company.—The Vancouver Gas Company contemplate making extensive improvements during the coming summer and will construct about ten miles of new gas mains.—Acland Hood will erect a new dance hall on Pender street.—Work will shortly be commenced on the new block on Hastings street for Crowe & Wilson.

TORONTO, ONT.—J. O. Reaume, Minister of Public Works, requests tenders by noon of the 19th inst. for the reconstruction of a cottage at the Asylum for the Insane, Mimico.—The trustees of St. John's Presbyterian church, corner of Gerrard street and Bolton avenue, have in contemplation the erection of a new church at Broadview and Simpson avenues, although it has not yet been decided whether to commence the building this year or defer it till a later date.—The Temiskaming Railway Commission have decided in favor of adopting electric power for the railway from North Bay to the Blanche river. This will mean the electrification of the first 150 miles of the road. It has also been decided to call for tenders for building another section of the road.—Land is now being expropriated for the new Union station. The property will include the whole block bounded by Front, Bay, Lorne and the Esplanade.—The Canadian Chemical Manufacturing Company have decided to erect a large smelting plant in the vicinity of Marmora, Ont.—The Executive of the Young Liberal Club have been requested to report upon some practical plan of securing permanent headquarters for the club and may recommend the ecection of a new building.—The Board of Control will be asked for $25,000 for fitting up the assembly room in the City Hall.—The City Engineer has been requested to report on the cost of constructing underground lavatories at the corner of Queen and Terauley and Queen and James streets.—Hearn & Slattery, 40 King street west, want tenders for carpenter work of a large wooden building for storage purposes.—The City Engineer will recommend the construction of a bridge over the ravine at Wellesley street to connect with Sparkhall street, at a cost of from $150,000 to $200,000. He will also ask for a new 15,000,000 gallon pumping engine.

WINNIPEG, MAN.—The Industrial school at St. Paul's, recently destroyed by fire, will not be rebuilt.—Building operations during 1906 promise to be fully as extensive as last year. The following is a list, with probable cost, of the buildings already assured:—Canadian Northern, eight-storey hotel and depot, $1,000,000; Canadian Northern, new car and repair shops, freight sheds, round house, etc., $1,000,000; municipal improvements, including school buildings, $500,000; cathedral for St. Boniface, $250,000; new Winnipeg theatre to be erected corner Smith street and Ellice avenue, $200,000; Bank of Toronto, Main street, north of Bannatyne avenue, $185,000; Pedlar Roofing Co., Oshawa, Ont., warehouse and factory, $150,000; addition to J. Y. Griffin & Co.'s packing plant, $150,000; Canadian Northern railway bridge over Assiniboine river in St. James for the Oak Point branch and the street railway, $125,000; new jail in Fort Rouge, $110,000; Codville & Co.'s brick and stone warehouse on Victoria street, $110,000; Sons of England hall, $80,000; new hall for Northwest Commercial Travellers' Association, $75,000; Harmer & Rowan's business block on Notre Dame avenue, $75,000; Young

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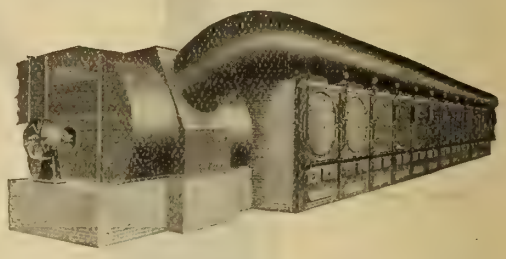

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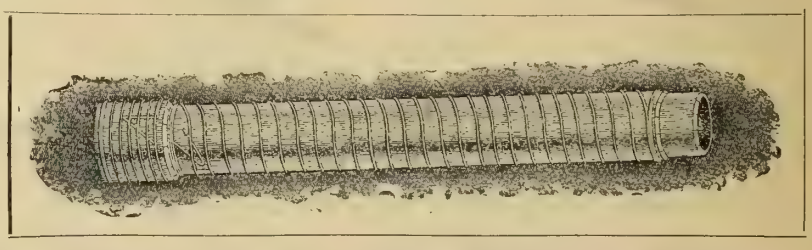

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500 " " " " " " " " " 4″ × 20 × 12 "

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Women's Christian Association building, $60,000; J. A. M. Aikins block, south-east corner of Portage avenue and Donald street, six stories, $60,000; factory for American firm (name withheld) to be built on property sold by Western Realty Co., $60,000; examining warehouse for Dominion government on corner McDermot and Rorie, $60,000; J. R. Clements, combined store and apartment block, corner Princess and Logan, $50,000; H. Radford, painter, six-story building on corner Market and Louise street, $50,000; addition to General Hospital, for which $150,000 was voted, $50,0000; large hotel corner King and Main streets, owner's name not yet divulged, $50,000; new hall for Independent Order of Foresters, $50,000; Ridout-Gilbert Co., new store, $40,000; new hall for St. Andrew's Society, $40,000; extra three stories to McIntyre block, $40,000; A.H. Pulford's new office building and warehouse on Donald street, north of Portage avenue, $40,000; W. B. Carter's apartment block, corner Assiniboine and Hargrave streets, $40,000; new Young church to be built on present site, $40,000; Winnipeg Rowing Club's new club house, $30,000; Brown block, corner Main and Pacific, to replace premises recently destroyed by fire, $30,000; racing stables at Kirkfield track, St. Charles, $30,000; Manufacturing Co., London, Ont., (name withheld by request) warehouse and factory, $25,000; Dominion Bridge Co.'s plant, $25,000; new church for Powers St. Baptist congregation, $25,000; additions to T. Eaton block, $20,000; Roberts Heating & Ventilating Co., Minneapolis, warehouse and branch factory, $20,000; warehouse for Canadian Port Huron Machinery Co. to replace old one destroyed by fire, $20,000; horse and cattle stables and pavilions at Agricultural college, $15,000; additions and alterations to second and third stories of Canada Permanent block, $15,000; remodelling of Hudson's Bay stores on Main street, $10,000; Stuart Machinery Co.'s shops, $10,000; new buildings at exhibition grounds, including possible new grand stand, $10,000; two new barracks for Salvation Army, one on corner of Nena and Alexander and second on Main and Manitoba, $10,000; Norwood combined fire hall and police station, $8,000; new edifice to be built by members of First Baptist church, on Shore street, in vicinity of St. James park, $5,000.—

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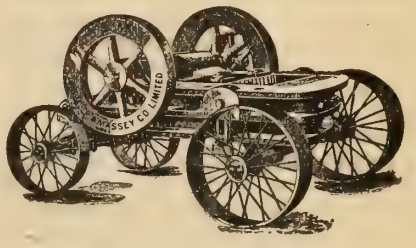

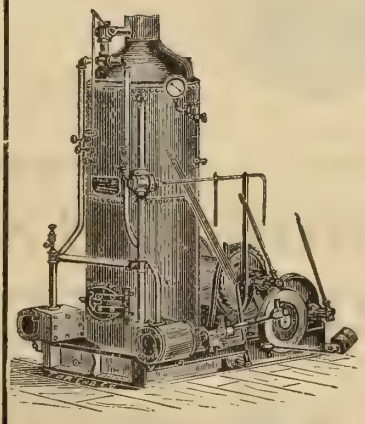

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The Power Committee of the City Council have instructed the City Engineer to make surveys with a view to ascertaining the amount of electric energy that can be developed at Seven Portages and at Point des Bois Falls. One of these sites will likely be purchased for a municipal power plant. — The Dominion Department of Public Works have given instructions for the immediate commencement of the proposed work for the improvement of the navigation of Last Mountain Lake, in Saskatchewan. It is understood that a dam will be constructed.—The congregation of St. Giles Presbyterian church, Selkirk ave., have in view the erection of a new edifice costing about $30,000 —The Catholic Club, of which J. E. O Connor is president, are considering the erection of a new club building.—The Bell Telephone Company expect to expend about $750,000 this year in construction work in the west outside of Winnipeg.—The Grain Exchange have appointed a committee to secure all information necessary in respect to the erection of a new building.

CONTRACTS AWARDED.

TORONTO, ONT.—The contract for constructing the Implement and Process building at the Exhibition grounds has been let to C. R. S. Dinnick.

MEAFORD, ONT.—D. S. Pratt and Alex. McDougall have been awarded the contract for docks in connection with the new elevator here; price about $50,00 .

AMHERST, N. S.—The contract for building a spur line of railway from the Intercolonial railway to the Amherst pier has recently been awarded to Mr. Kitchen, of Fredericton, the work to be completed by May 1st.

FREDERICTON, N.B.—The Department of Public Works have let the following contracts: Little Dipper Harbor bridge, St. John county, to R. A. Logan, of Gibson; Baltimore bridge, Queens county, to McLaggan Bros., of St. Marys.

VANCOUVER, B. C.—Business block on Pender street for W. A. Hood: Dalton & Eveleigh, architects; Smith & Sherburne, contractors. Building will be three stories and basement, cost about $40,000. — Three-storey building, corner Richards and Pender streets, for William Walsh: J. Dissette, contractor; pressed brick, brown stone trimmings, cost $25,000.

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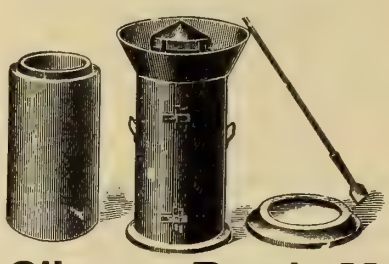

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CALENDARS RECEIVED.

Calendars have come to hand during the past week from the Gartshore-Thomson Pipe and Foundry Company, Hamilton, and the Canadian Fairbanks Company, Montreal.

A circular issued to the shareholders of the International Portland Cement Company, Hull, Que., shows that the net earnings for the five months ended November 30th, 1905, were $8,518, which is equal to a little over 8 per cent. on the total capital of the company.

J. S. Irvin, managing director of the International Portland Cement Company, Hull, Que., recently returned from Winnipeg, where he secured an order for 25,000 barrels of cement for early spring delivery. About two weeks ago the International Company secured another order for 25,000 barrels from the west, which makes a total of 50,000 barrels that will soon go forward from the Hull works to points in Western Canada.

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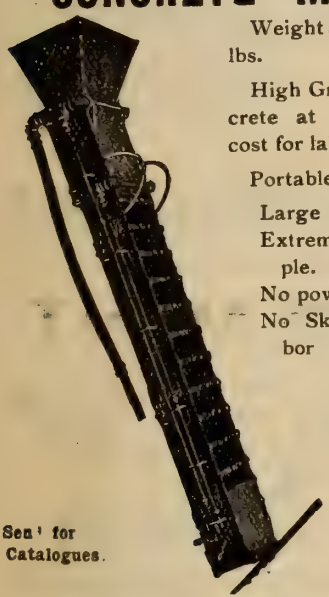

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Extremely simple.

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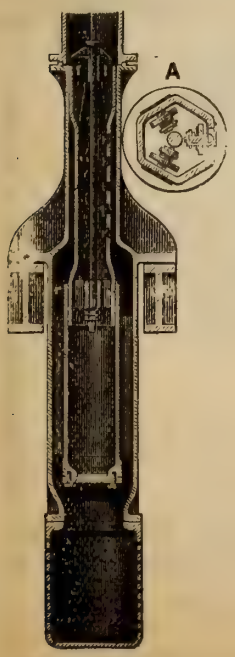

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							Neat.					3 (Sand) to 1 (Cement)				
					Initial	Final	1 dy.	7 dys.	28 dys.	3 mos	1 yr.	1 dy.	7 dys.	28 dys.	3 mos.	1 yr.
1903	20	O.K.	3.135	2.1	162	345	307	701	783	827	*	74	214	299	367	*
1904	44	O.K.	3.150	2.0	132	342	300	744	848	914	938	86	262	354	401	427

* Tests for 1 year were not completed when records closed. 1905 report not yet issued.
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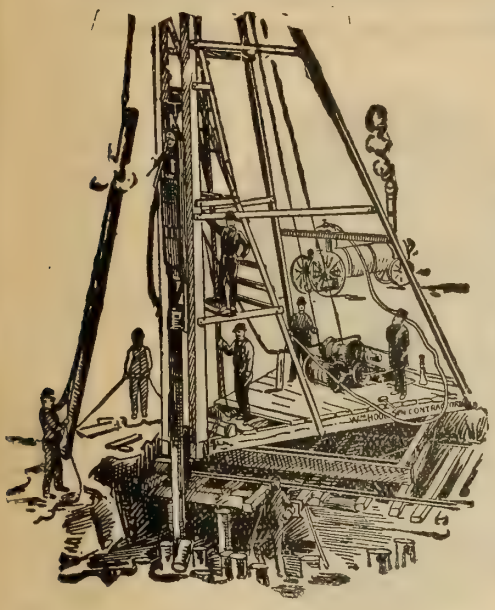

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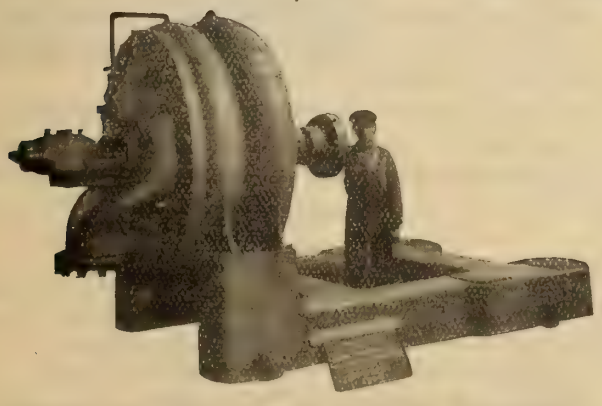

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TORONTO ENGINEERS' CLUB.

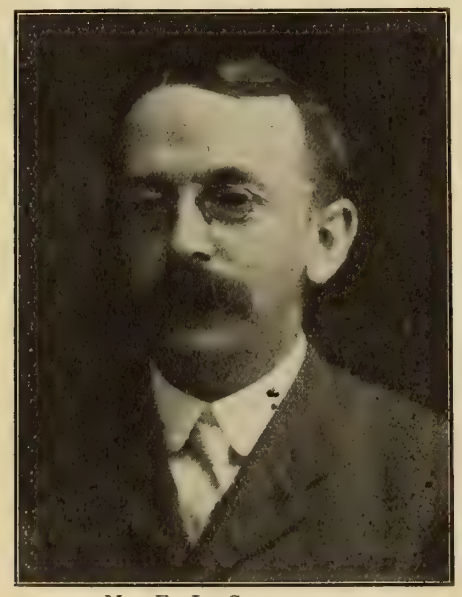
The annual meeting was held in the Club Rooms, 96 King street west, on the evening of the 11th inst., and was largely attended.

The president, Mr. R. F. Tate, presided, the following persons being in attendance: F. L. Somerville, W. J. Bowers, S. Keith, J. Stanley Richmond, Chas. E. Goad, Robt. W. King, A. R. Campbell, Willis Chipman, C. M. Canniff, A. J. VanNostrand, C. H. Heys, E. R. Clarke, J. C. Johnston, L. V. Rorke, E. A. Stone, W. M. Macphail, John S. Fielding, C. H. Mortimer, W. H. Patton, M. A. Stewart, H. C. Champ, Stanislas Gagne, A. J. Ward, John W. Hunter, J. G. Sing, A. B. Barry, W. A. Johnston, S. Dillon-Mills, E. Walker, G. R. Mickle A. M. Wickens.

The report of the Executive Committee showed that there had been held during the year 25 regular and 31 executive meetings. Reference was made to the meeting of the Canadian Society of Civil Engineers to be held in Toronto Jan. 30th and 31st and Feb. 1st. Mr. Cecil B. Smith is the secretary of the local committee in connection with this meeting. The report as to membership is as follows:

	Resident	Non-Resident	Total
New members elected during the year	22	5	27
Resignations	7	0	7
Deaths	2	0	2
Membership Lapsed about	3	5	8
Increase	10	0	10

The treasurers report presented by Mr. Bowers showed total receipts of $689, and expenditures of $474; outstanding accounts, $115; accounts owing, $56; cash balance, $387, (an increase of $200 since last year) and in addition $325 in savings bank.



Mr. F. L. Somerville,
President-Elect Toronto Engineers' Club.

Mr. VadNostrand reported in humorous vein for the Finance Committee.

The report of the Rooms Committee, presented by Mr. Chas. H. Heys, showed that the receipts balanced the expenditure.

Mr. S. Dillon-Mills reported for the Library Committee, showing an expenditure for the year of about $100.

The report of the Committee on Civic Improvements, read by Mr. Robt. W. King, stated that no response had come to the request of the Club for adequate representation on the Guild of Civic Art, from which lack of courtesy it was inferred that the co-operation of the Club, although invited, was not desired by the Guild.

The following gentlemen were appointed a committee to revise the Constitution of the Club:—Messrs. Tate, Somerville, C. B. Smith, Gamble, Chipman, Bowers and Canniff.

After the appointment of Messrs. Gagne and Clarke as scrutineers the election of officers for the present year was proceeded with, and resulted as follows:—

Mr. R. F. Tate,
Retiring President Toronto Engineers' Club.

F. L. Somerville, president; C. B. Smith, 1st vice-president; J. G. Sing, 2nd vice-president. Directors—J. S. Fielding, chairman Rooms Committee; C. N. Canniff, chairman Library Committee; R. G. Black, chairman Paper Committee; treasurer, W. J. Bowers, 23 Jordan street; secretary, W. Chipman, 103 Bay street. Auditors—A. J. VanNostrand, C. H. Heys.

A meeting of the Club will be held within a few days to appoint the standing committees and arrange for January meetings.

Mr. Tate, the retiring president, in his valedictory address, reviewed the work of the Club during his year of office. He referred in feeling terms to the death of Mr. Kivas Tully and Major Henry A. Gray, past presidents of the Club, and Mr. Arthur Harvey, who, though not a member, had contributed a valuable paper on the metric system. Canada's rapid development along engineering and other lines was outlined.

It was ordered that the address be printed and supplied to the members in pamphlet form.

A very pleasing feature of the evening was the presentation of a valuable travelling bag to Mr. Chipman, the efficient and indefatigable secretary of the Club.

POWER FROM GARBAGE.

A report prepared by Dr. Hodgetts, Secretary of the Provincial Board of Health, shows that 143 municipalities in England possess incinerating plants for the disposal of garbage. Of these 120 supply, without extra cost, electric light or power for street railways, waterworks or sewerage systems. Three cities of Scotland and eight in Ireland thus dispose of all their refuse. This plan has not been adopted anywhere on this continent, though several United States cities are considering it. The City of Bermingham recently completed a plant at a total cost of $175,000. This develops electric power enough to be used in several municipal establishments, and saves the city $5,000 a year in this respect, in addition to destroying refuse in a sanitary manner.

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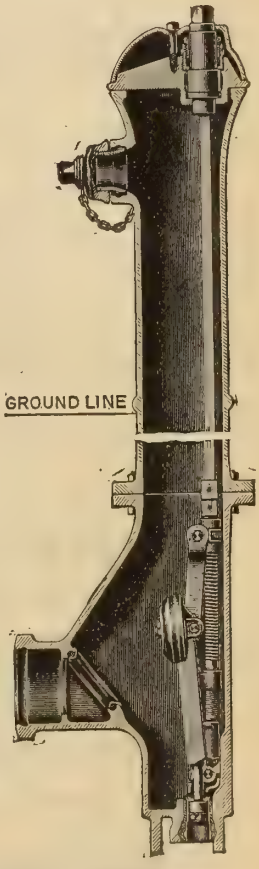

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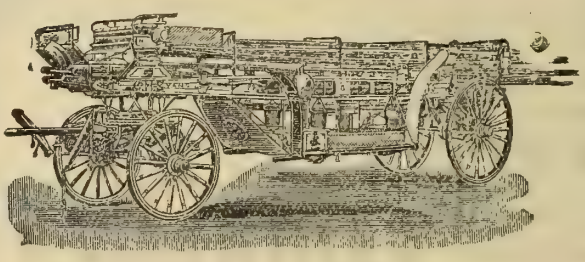

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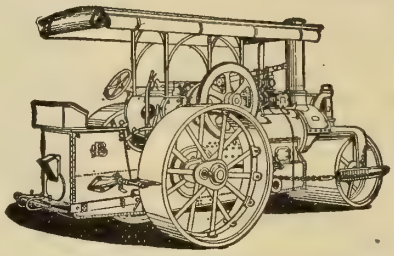

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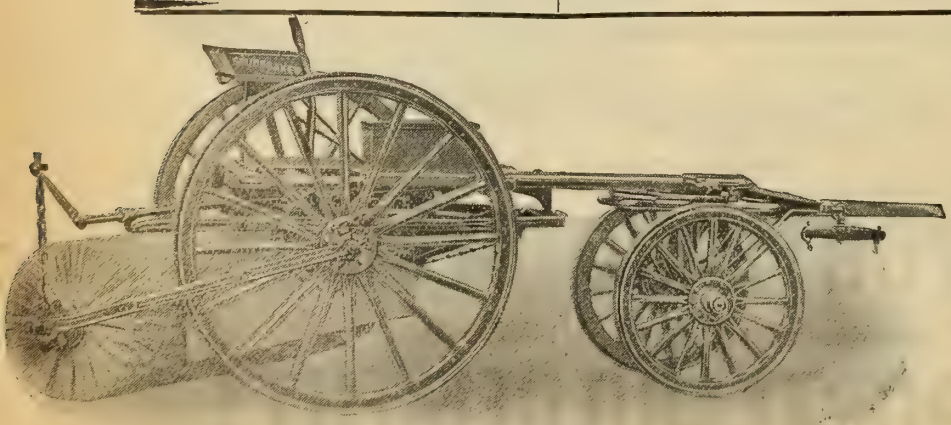

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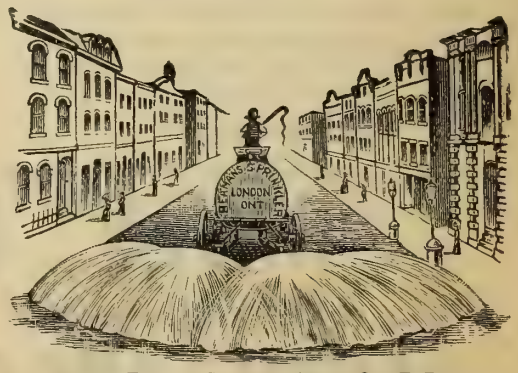

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PORTLAND CEMENT
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Capacity 11,000 Barrels Per Day.

Capacity in 1906 will be 20,000 Barrels per day.
The Lehigh Company are now erecting a plant at Belleville, Ontario, of 4,000 barrels per day capacity. For prices, etc., address—

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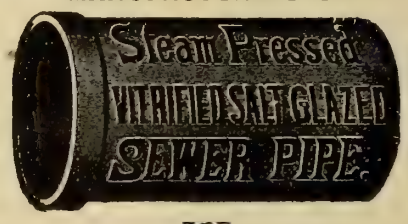

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The Isthmain Canal Commission wisely demanded a SPECIAL QUALITY Cement for the Panama contract let May, 1905. The sea water clause, while necessary to INSURE THE WORK, was undoubtedly severe. One of the largest American Companies tied the bid of Alsen's. The Government awarded the contract to Am. Aslen's in PREFERENCE, at EQUAL FIGURES. The bids ARE ON RECORD at Washington. Alsen's product has always been recognized as of HIGHER AVERAGE quality than ANY other brand. It is ultra high grade and a more PRACTICALLY PORTLAND. It has become known as the "absolutely safe cement."

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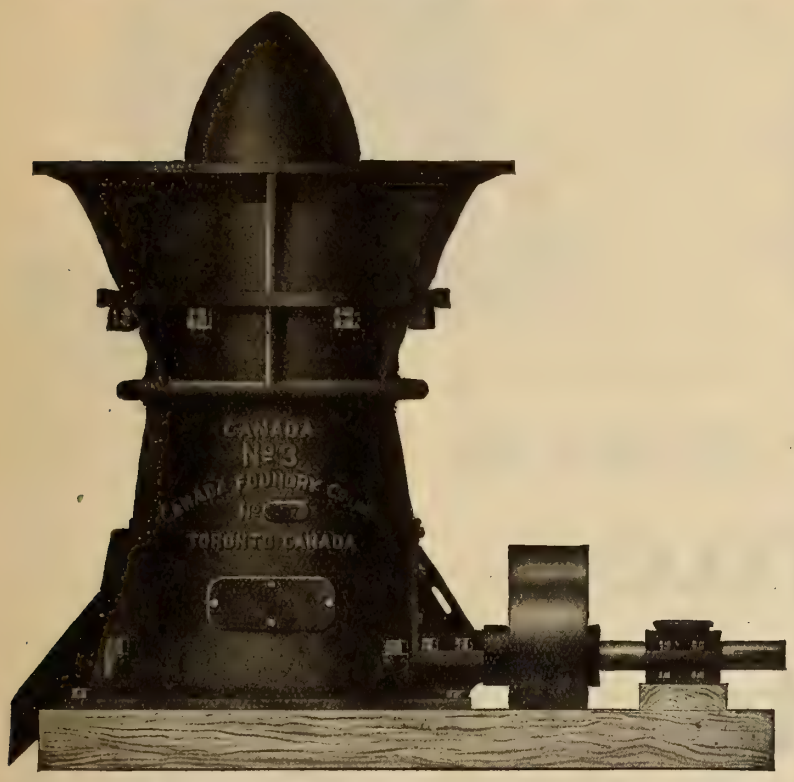

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Send for Bulletin No. 31

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For Water, Gas, Culvert and Sewer

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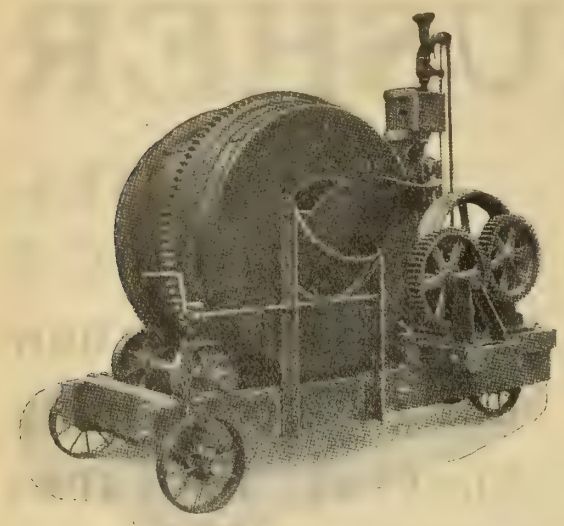

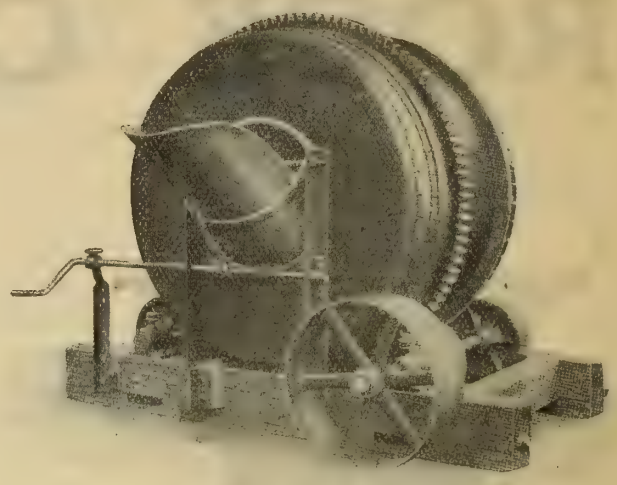

— IN THE —

Ransome Concrete Mixer

1906 MODEL

We are offering what is, without any manner of doubt, the very best mixing machine to be had to day.

A machine that is distinctly different from all others. It is the simplest machine on the market, there is not one unnecessary part to afford opportunity for wear. Ransome Mixers mix concrete or mortar with equal efficiency. They mix speedily and at low cost, as they save one handling of concrete and the whole batch or part of same can be discharged into wheelbarrows without delaying mixing operation.

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Saving in Labor, Time and Cost

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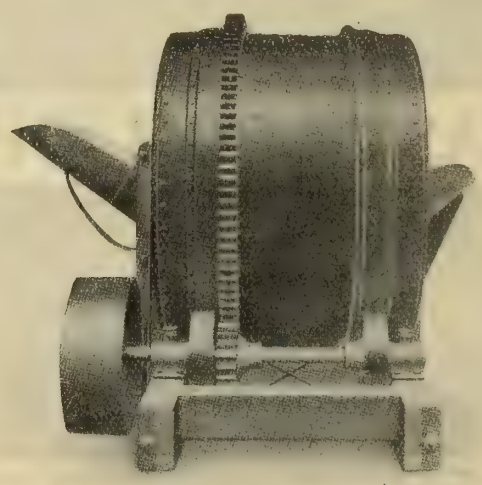

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CANADIAN

Contract Record

A Weekly Journal of Public Works, Tenders, Advance Information and Municipal Progress

This Paper Reaches Every Week the Town and City Clerks, Town and City Engineers, County Clerks and County Engineers, Purchasers of Municipal Debentures and Leading Contractors in All Lines Throughout Canada

VOL. 16. TORONTO, MONTREAL — JANUARY 24, 1906 — WINNIPEG, VANCOUVER • No. 47

THE CANADIAN CONTRACT RECORD
PUBLISHED EVERY WEDNESDAY
As an Intermediate Edition of the Canadian Architect and Builder.

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CITY OF EDMONTON, ALBERTA

Tenders are invited for electric light and telephone poles as follows, viz:

100—40 ft. 9 in. and over at small end.
600—35 ft. 8 in. and over at small end.
200—30 ft. 8 in. and over at small end.

Poles to be straight and sound and peeled.
Tenders to state kind of timber tendered on.
Price to be F.O.B Edmonton delivered in March and following months as may be required.
Tenders to be delivered to the undersigned not later than WEDNESDAY, 31ST INST. Any further information will be given on application to J.H Hargreaves, Public Works Commissioner.

GEO. J KINNAIRD,
Secretary-Treasurer.

Edmonton, Jan. 9, 1906.

TENDERS
For Street Lamps and Transformers

Sealed tenders addressed to Alderman J. C. Gibson, Chairman Fire, Water and Light Committee, will be received at the office of the undersigned up to 3.30 p. m. on MONDAY, FEBRUARY 12TH, 1906, for the following supplies for street lighting system for the City of Winnipeg, namely:

100 to 200 Series Alt. Arc Lamps.
100 to 200 Absolute Cut-outs.
2 or 4 Constant Current Transformers.

Specifications and forms of tender may be obtained on application to F. A. Cambridge, City Electrician, Winnipeg, Can.
Each separate tender must be accompanied by an accepted cheque or draft (payable to the order of the City Treasurer) or cash deposit for an amount equal to 5 per cent. of the tender, which will be subject to forfeiture in case of failure on the part of the contractors to enter into a written contract with approved sureties when called upon to do so.
The city reserves the right to reject any or all tenders, or to accept any bid which appears advantageous to the City of Winnipeg.

C. J BROWN,
City Clerk.

City Clerk's Office,
Winnipeg, Jan. 11, 1906.

TENDERS FOR BRIDGE ABUTMENTS AND FLOOR

Sealed tenders, addressed to "Chairman Board of Works Town of Owen Sound", will be received up to 6 p. m. FRIDAY, FEBRUARY 2ND, for the construction of the following:—

1. Two Cement-Concrete Bridge Abutments on piles some 590 c. yds.
2. Cement-Concrete Floor for Bridge 36 ft. wide and 100 ft. in length, reinforced with expanded metal aver. depth 5½ inches.

An accepted bank cheque for 5 per cent., payable to the order of the Treasurer Town of Owen Sound, shall accompany each tender, the same to be forfeited if the successful tenderer decline the contract or fail in the performance thereof and to be returned in case of non-acceptance.
The lowest or any tender not necessarily accepted.
Plans and specification to be seen at Town Engineer's office.

R. McDOWALL, C.E.,
Town Engineer.
WM. MCCLARTY, Esq.,
Chairman Bd. of Works.

CORPORATION OF THE TOWN OF PORTAGE LA PRAIRIE
Engineer Wanted

Applications for the position of Resident Engineer of the Town of Portage la Prairie will be received up to FEBRUARY 2ND, 1906. Duties to commence on April 1st.

By order,

F. A. WHITAKER,
Town Clerk.

Portage la Prairie, Jan. 9th, 1906.

TENDERS FOR ELECTRIC GENERATORS

Sealed tenders addressed to Alderman J. C. Gibson, Chairman Fire, Water and Light Committee, for supply of two 500 H. P. Electric Generators, will be received at the office of the undersigned up to 3.30 p. m. on MONDAY, FEBRUARY 12TH, 1906.
Specifications and forms of tenders may be obtained on application to H. N. Ruttan, City Engineer, Winnipeg. Canada.
Each tender must be accompanied by an accepted cheque or draft payable to the order of the City Treasurer, or cash deposit for the sum called for in the form of tender supplied, which will be subject to forfeiture in case of failure on the part of the contractor to enter into a written contract, with approved sureties, if called upon to do so.
The city reserves the right to reject any or all tenders or to accept any bid which appears advantageous to the City of Winnipeg.

C. J. BROWN,
City Clerk.

City Clerk's Office,
Winnipeg, Jan. 10, 1906.

Partnership wanted in Contractor's Business in Toronto by experienced Engineer with capital; the highest references given and required. Address Box 39 CONTRACT RECORD, Toronto.

The City of Regina
CITY ENGINEER

The undersigned will receive applications up till SATURDAY, FEBRUARY 3RD, 1906, for the position of City Engineer and Surveyor for the City of Regina, at a salary of $2000.00 per annum.

J. KELSO HUNTER,
Sec'y-Treas.

Regina, Sask., Jan. 3rd, 1906.

NOTICE
Tenders for Steel Pipe

Tenders will be received by the undersigned up to 12 o'clock noon, JANUARY THE 27TH, for 399 lineal feet of 36 inch steel pipe required for the extension of the O'Kill Street Sewer.
Specifications may be obtained at the office of the undersigned, where all other information may be obtained.
The lowest or any tender not necessarily accepted.

H. B. R. CRAIG,
City Engineer,
Kingston, Ont.

FOR SALE

The Corporation of the Town of Uxbridge, Ontario, will receive sealed tenders at the office of M. H. Crosby, Chairman of the Finance Committee, or J. W. Gould, Town Clerk, up to and including the 9TH DAY OF FEBRUARY, 1906, for Eight Thousand Dollars Debentures of the Town of Uxbridge, computed at four per cent. per annum for twenty years. Interest and principal repayable in twenty equal annual instalments of Five Hundred and Eighty-Eight 66-100 Dollars.
It is proposed to divide each annual instalment into four equal parts of One Hundred and Forty-Seven 16½ Dollars each, thus giving individuals an opportunity of tendering for lots of Two Thousand Dollars, or for the whole amount of the debentures.

Debentures For Sale

Sealed tenders, marked "L.B.", with be received by the undersigned until FRIDAY, FEBRUARY 2ND, 1906, at noon, for the purchase of $10,000 of Municipal Debentures of the Corporation of the Town of Harriston, bearing interest at the rate of 4½ per cent. per annum, principal and interest thereon to be payable in twenty equal annual payments of $768.76 each at the Standard Bank in Harriston, on the first day of March in each year. The first of such payments to be made on the first day of March, 1907. The purchase money to be paid, and debentures delivered at Harriston on the first day of March next.
No tender necessarily accepted.

L. BRISBIN,
Town Treasurer,

[FOR ADDITIONAL ADVERTISEMENTS FOR TENDERS SEE NEXT PAGE.]

TENDERS

will be received by the undersigned up to five o'clock p.m. on SATURDAY, 27TH INST., for the various trades (except heating) required for the erection and completion of St. Peters church, Bloor street west, Toronto, Ont. The lowest or any tender not necessarily accepted.

A. W. HOLMES, Architect,
10 Bloor East.

WANTED

Manager for the Stratford Water Works.

State experience and salary expected. Application to be received up to noon of 29TH OF JANUARY.

WM. LAWRENCE,
Sec'y-Treas.

TOWN OF BARRIE

Debentures for Sale

Sealed tenders will be received by the undersigned up till noon FEBRUARY 15TH, 1906, for $15,000 4½ per cent. debentures. No tender necessarily accepted. For further particulars apply to

E. DONNELL,
Town Treasurer.

Barrie, January 20th, 1906.

TOWN OF PICTON
PROVINCE OF ONTARIO

ELECTRIC LIGHTING

NOTICE

Sealed tenders will be received by the Secretary of the Board of Commissioners for E. L. & W. W. until 6 p.m. on

Thursday, February 15th, 1906

for furnishing One Alternator of 175 k w. capacity, and other necessary Power House Equipment, Enclosed Arc Lamps, Wiring, etc.

General specification, forms of tender, and skeleton plan of the town may be seen at the office of the Secretary of the Board of Commissioners for E. L. & W. W. at Picton, or at the office of the Chief Engineer, 103 Bay Street, Toronto.

No tender necessarily accepted.

H. B. BRISTOL, ESQ.,
Chairman Board of Commissioners for E. L. & W. W., Picton, Ont.

D. L. BONGARD, ESQ.,
Secretary Board of Commissioners for E. L. & W.W., Picton, Ont.

GEO. M. FARRINGTON, Esq.,
Mayor, Picton, Ont.

WILLIS CHIPMAN,
Chief Engineer,
103 Bay St.,
Toronto, Ont.

CONTRACTS OPEN.

ARNPRIOR, ONT.—Thomas Moran is about to build two residences.

BELLEVILLE, ONT.—The Baptists have decided to build a new church.

MILTON, ONT.—The Town will issue debentures for $20,000 for cement walks.

BUXTON, ONT.—The question of building a new town hall is under consideration.

TILSONBURG, ONT.—C. O. Maddock intends building a brick residence on Venison street.

BERLIN, ONT.—Simeon Brubacher has purchased a site on which he will build a large planing mill.

SHEILA, N. B.—It is said that the Tracadie Lumber Company have decided not to rebuild their saw mill.

STEWARTON, ONT.—The Presbyterians have decided to erect a new church at a cost of $25,000.

INGERSOLL, ONT.—The Imperial Bank have bought the site occupied by the Mansion House and will build in the spring.

LANCASTER, N.B.—It is proposed to expend $500 to make surveys and procure plans and estimates for sewerage extension.

ST. JOHN, N.B.—It is probable that John Galt, C.E. & M.E., Toronto, will be engaged to report on the lighting of this city.

GLADSTONE, MAN.—P. St. Clair McGregor will receive tenders up to 30th inst. for construction of a pile bridge on Squirrel Creek.

VICTORIA HARBOR, ONT.—It is understood that the C.P.R. will build elevators at this place in connection with their new branch line.

BELLEVILLE, ONT.—The Grand Trunk Railway Company purpose remodelling their station and increasing their yard facilities here.

CARBERRY, MAN.—A canvas is being made with a view to ascertaining the prospects for an electric light plant which the town will likely install.

CALGARY, ALTA.—The by-law to raise funds for the South-Ward school building will be submitted to the ratepayers on the 25th inst.

SASKATOON, ALTA.—The Roman Catholic Bishop of Prince Albert has bought land in the City Park survey, on which a hospital will be erected.

CHATHAM, N.B.—The Miramichi Lumber Company will, in the spring, commence the erection of a rossing mill here, at a cost of about $50,000.

SIMCOE, ONT.—Bids are invited by Frank Reid, town treasurer, up to noon of February 1st for purchase of $5,000 thirty-year 4½ per cent. debentures.

FOREST, ONT.—The Council will advertise for tenders for the construction of the Alexander and Miles-Walker drains, to be received by February 1st.

STELLARTON, N.S.—Tenders are invited by D. Pottinger, manager Intercolonial Railway, Moncton, N B., for addition to brick engine house at this place.

GRAND FALLS, N.B.—The Grand Falls Power Company have submitted to the Dominion Government plans for proposed dam and other works at this place.

KENORA, ONT.—The Board of Trade will ask the Town Council to secure surveys and estimates for an electric railway between Kenora and Keewatin.

NANAIMO, B.C.—It is reported that a company in which F. H. Sheppard is interested intend building a saw mill in the vicinity of Beck's Lake, South Wellington.

SHERBROOKE, QUE.—Extensive additions to the works of the Canadian Rand Drill Company will shortly be undertaken, including the erection of a new foundry.

VICTORIA, B. C.—Hooper & Watkins, architects, are this week taking tenders on the erection of a children's ward at the Provincial Royal Jubilee Hospital.

MAISONNEUVE, QUE.—The by-law to grant a bonus of $10,000 to Brunet & Couson to establish a shoe factory will be submitted to the ratepayers on the 29th inst.

AMHERST, N.S.—Architects are invited to submit competitive plans for a brick church to be built here, to accommodate 1,200 persons. Particulars from H. L. Hewson.

DESERONTO, ONT.—Robert N. Irvine, Town Clerk, will receive tenders up to February 20th for the construction of cement sidewalks, in all about 12,000 square feet.

NEW WESTMINSTER, B C.—The City Council and Board of Trade are taking joint action with a view of getting tramway extension to Millside, two miles up the river.

ATWOOD, ONT.—The Council will petition the Ontario Government to grant $50,000 for the purpose of constructing trunk drains along the river and purchasing steam dredges.

UXBRIDGE, ONT. — Bids are requested by M. H. Crosby, Chairman Finance Committee, up to Friday, February 9 h, for purchase of $8,000 20-year 4 per cent. debentures.

PORT ARTHUR, ONT.—The Town Council have made application to the legislature for permission to build a belt line street railway through the residential portion of the town.

SHOAL LAKE, MAN.—Tenders for erection of a brick veneer school house will be received by W. M. Ingersoll up to February 15th. Plans by Frank L. Evans, architect, Winnipeg.

EAST TORONTO, ONT.—Separate or bulk tenders will be received by Dr. Britton up to February 1st for all trades for erection of High School. Munn & Mead, architects, Toronto.

MARKHAM, ONT.—J. McDougall, County Engineer, estimates the cost of building a bridge over the Rouge river at $14,000. No decision has been reached by the County Commissioners.

DIGBY, N.S.—The erection of a new court house is about to be commenced. —The Whale Cove Trading Company, in which George W. Whitman is interested, will build a new freezer.

GUELPH, ONT.—It is understood the Ontario Government will include in the estimates for 1906 an appropriation for the erection of a new dairy building at the Ontario Agricultural College here.

BRULE LAKE, ONT.—The Grand Trunk Railway are maturing plans for the erection of a number of hotels to accommodate tourists, one of which will be located here and another at Rock Lake.

GALT, ONT.—The South Waterloo Agricultural Society will co-operate with the Parks Commission and Horse Show Association to erect a large joint poultry show building and stables on the fair grounds.

VEGREVILLE, ALTA.—The Presbyterians have chosen a lot on which to build in the spring. The English church congregation will also build and it is rumored that the Baptists contemplate building.

DRESDEN, ONT.—The ratepayers defeated a by-law to raise $18,000 for a new school.—A vote will be taken on a by-law to provide $25,000 to assist A. H. Turner, of Toronto, in building a twine factory here.

ST. THOMAS, ONT.—Conferences are being held with a view to commencing work on the proposed Ross street subway to be built by the city and the Michigan Central Railway, at an estimated cost of $66,000.

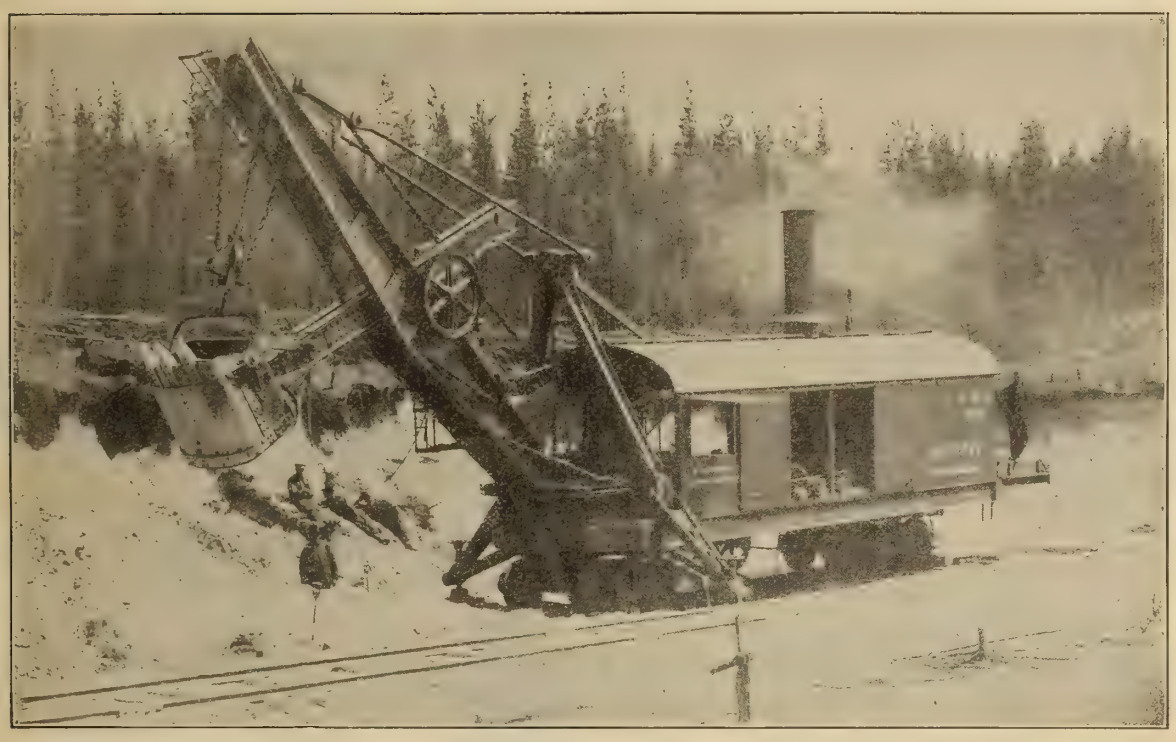
PARRY SOUND, ONT. — T. T Simpson, civil engineer, Ottawa, has been appointed engineer for this town, and is new preparing plans for a new electric and hydraulic plant. Specifications will be ready in a few weeks.

GANANOQUE, ONT.—Bids for purchase of $15,000 15-year 4 per cent. debentures will be received by S. McCammon, Town Clerk, up to February 6th. The debentures are issued to raise money to assist a manufacturing industry.

OWEN SOUND, ONT. — William McClarty, Chairman Board of Works, will receive tenders up to Friday, February 2nd, for construction of two cement-con-

BUCYRUS

Steam Shovels
Wrecking Cranes
Railroad Pile Drivers



For Rapid and Continuous Work under Heavy Conditions Bucyrus Steam Shovels are Unequalled. They have Proved this on many large Contracts in Canada and the United States.

Specifications and Estimates on Application

W. H. C. Mussen & Co.

Railway, Mining and Contractors' Supplies

MONTREAL

crete bridge abutments and cement-concrete reinforced floor for bridge 36 × 100 feet.

CHATHAM, ONT. — W. G. McGeorge, C.E., has reported to Chatham Township Council on the construction of a new drainage and pumping scheme in Running Creek, first concession of Gore, and the matter will be considered this week.

ST. CATHARINES, ONT.—R. E. Speakman, City Engineer, has submitted to the Board of Works a plan for the improvement of the square on St. Paul street, which it is thought will be included in the work of paving which will be done in the near future.

GODERICH, ONT.—A scheme has been started for the development of a water power on the Maitland river at a point known as the "Black Hole". The promoter of the enterprise is J. T. Goldthorpe, who estimates that the development will cost about $250,000.

BARRIE, ONT.—Contractors are invited to supply plans and specifications, with prices, for heating with warm air furnaces the fire hall, council chamber, police court and lock-up. Tenders, addressed to E. Donnell, town clerk, must be received not later than February 2nd.

KINGSTON, ONT. — J. P. Smith, architect, is preparing plans for a new club house, piers, etc., for the Kingston Yach Club. Tenders to be called for at once. Same architect is preparing plans for a new Presbyterian church at McDonald's Corners, Ont., to be built of cement blocks.

ST. MARYS, ONT.—A by-law will be submitted to the ratepayers to provide a site and to guarantee bonds to the extent of $25,000 for the Canadian Flax Cordage Company, of which George H. Campbell, of Toronto, is the president. The company agree to spend $60,000 on factory and plant.

WELLAND, ONT.—N. W. Porter has purchased the Arlington Hotel and intends building another storey.—The Plymouth Cordage Company have had plans drawn for a storehouse 745 × 60 feet. They will also build immediately a picket house, tar house, repair shop and several residences.

HAMILTON, ONT.—R. Duncan & Company are said to have arranged for a ten-year lease of their premises and will make extensive alterations.—The United Typewriter Company will remodel the Albert Chambers, recently purchased by them.—Buntin & Gillies are said to be arranging to build on a central site.

FREDERICTON, N. B.—The City Council have passed a resolution urging the Provincial Government to make the new highway bridge of sufficient strength to carry street railway traffic. — James Mitchell, of West Newton, Mass., has submitted to the City Council a proposition to construct a street railway here.

EDMONTON, ALTA. — The report has been confirmed that the Canadian Pacific Railway and Grand Trunk Pacific Railway have commenced soundings in the Saskatchewan river for the purpose of ascertaining the character of the river bed on which the piers of the proposed bridge will rest. It is said that rough plans of the bridge have been prepared.

WOODSTOCK, ONT.—John Morrison, city clerk, will receive bids up to Tuesday, 30th inst., for purchase of $30,000 thirty-year 4 per cent. debentures for improving and extending the waterworks and electric light systems, and $7,000 thirty-year 4½ per cent. debentures.—Plans have been submitted to the

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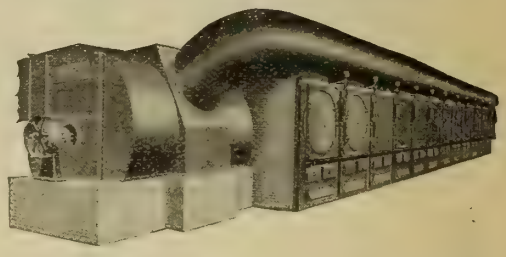

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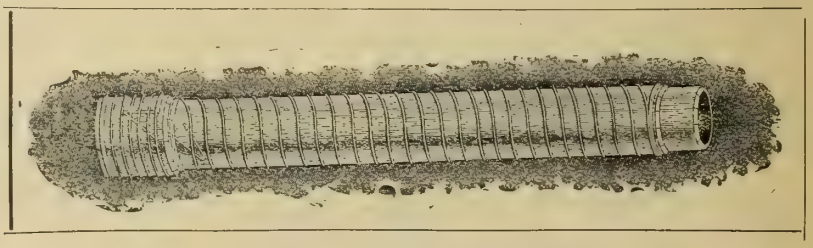

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Collegiate Institute Board for an addition to the building to increase its size to 119 × 72 feet.

LONDON, ONT.—George C. Gibbons has purchased the Wellington property on Richmond street, between Dundas and King, and it is said that the London and West Trusts Company will erect a new building on part of the site. —Tenders are invited up to the 26th inst. for mason, cut stone, carpenter and metal work and hot water heating required for remodelling a building on the corner of Richmond and King streets, this city, for the Imperial Bank of Canada. N. R. Darrach, of St. Thomas, is the architect.

TRURO, N.S.—It is now certain that a new building is to be erected on the site of the reeent fire on Inglis street, a number of capitalists, acting through G. W. Casson, having purchased the whole of Gunn's block. There will be stores on the ground floor and an opera house in the third storey.—A company known as Stanfields, Limited, has been organized to take over the business of the Truro Knitting Mil's Company. Extensions are proposed, the first of which will be the erection of a worsted mill 250 feet in length and probably three stories high.

PETERBORO, ONT. — The new fire hall, for which the ratepayers have voted money, will be erected on Aylmer street. Plans for same will be prepared by W. Blackwell, architect. — New wharves are being planned by the Dominion Government, to extend southward from Hunter street about 1,000 feet. Stone cribwork will be used for the bottom and concrete for the top.—The Minister of Railways will this week consider the plans of the C.P.R. for their proposed line from this place to Victoria Harbor.

STRATFORD, ONT.—At the annual meeting of Knox Church a committee was appointed to have plans prepared for a new Sunday school building. The question of the necessity of erecting another Presbyterian church in the east end was also favorably considered.—The City Council favors a storm drainage system, the estimated cost of which is $10,000.—The question of alterations to the city hall was considered at the last Council meeting, but no definite action was taken. The City Solicitor has been instructed to prepare the necessary petition for the improvement of Romeo Creek, the work

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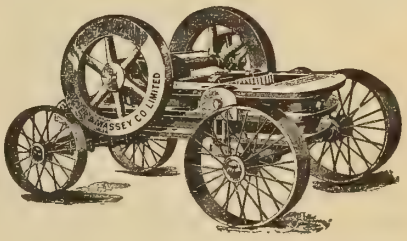

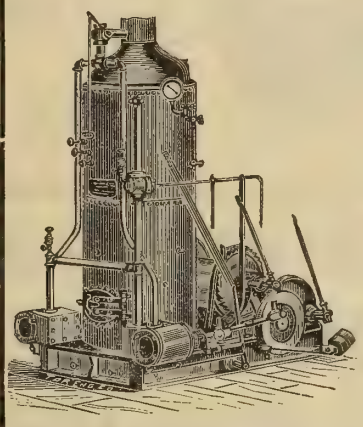

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to be constructed under the provisions of the Municipal Drainage Act.

WINNIPEG, MAN.—It is the intention to operate the Winnipeg, Selkirk & Lake Winnipeg Railway by electricity at an early date. It is also proposed to extend the road to Stonewall and Teulon.—Plans of school house to be erected at Shoal Lake, Man., may be seen at the office of F. R. Evans, architect, this city. —At a meeting of St. Paul's congregation held last week, it was reported that definite steps are being taken to erect a new church on the site purchased.—Judge J. S. Cummins, of Chicago, was in the city last week in connection with the proposed power development of the Great Falls Power Company. Surveys are now being made. — The Police Commissioners will ask the City Council to proceed at once with the erection of a new police station.

OTTAWA, ONT. — Revised plans have been prepared for the Fat Stock Show building with the object of reducing the cost. Contracts for masonry and carpentry will be awarded this week, while tenders for interior fittings, etc., estimated to cost $7,000, have not yet been called for. — The improvements which the Ottawa Electric Railway Company intend making at Britannia-on-the-Bay will include the extension of the pier, erection of a club house and enlargement of the auditorium. The pier will be extended 300 feet.—It is considered probable that the City Council will this year undertake the erection of an addition to the city hall.—Plans are being prepared for extensive alterations to Rideau Hall, to include a main hall about 100 × 30 feet, with an outer hall 60 × 20 feet. The present roof plan will be altered.

MONTREAL, QUE.—At a meeting of the directors of the Windsor Hotel held last week, it was decided to tear down the Windsor Hall in March and to begin work on the new wing as soon as possible in the spring.—The plans for the improvement and enlarging of Bonaventure station are said to be taking definite form and only awaiting certain details. The improvements will include an elevated track from St. Henri to the depot, to be constructed on stone pillars, with steel bridges at the street crossings. —The congregation of the Emmanuel church last week discussed the erection of a new edifice on Drummond street. It is expected that the construction work

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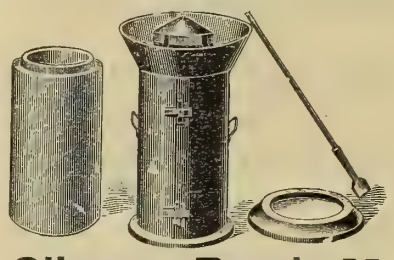

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will commence in the spring.—Specifications have been prepared on which to invite tenders for the Grand Trunk Pacific Railway from Touchwood Hills to Edmonton.

VANCOUVER, B.C. — The British Columbia Electric Railway Company are clearing the site for their new sub-station and car barns, tenders for which will be invited immediately.—A report has been submitted to Council recommending that plans be prepared for improvements to the city goal, including the installation of new heating apparatus. — By-laws were last week carried by the ratepayers providing the following sums : $750,000 for waterworks ; $100,000 for schools ; $100,000 for sewers ; $30,000 for a crematory. The by-law for English Bay improvements was defeated.—M.B.Curtis has purchased 82 feet on Hastings street and 120 feet on Gore avenue, and intends building thereon a theatre to cost $40,000, the plans for which are now being prepared.—John Lineham, of Calgary, was here recently looking for a suitable site on which to build a grain elevator.—Thomas W. O'Brien states that the Alaska Mines Railway Company will build a railway from Dawson to Sulphur Springs, a distance of thirty miles.

TORONTO, ONT.—Plans of High school to be built at East Toronto may be seen at 8 Albert street, this city.—Frankel Bros. have purchased property on the corner of Eastern avenue and the Don Improvement road on which they intend erecting a large warehouse and factory.—S. Price & Sons intend erecting a dairy building on the south side of Queen street, near Sherbourne, to be 70 x 310 feet, cost about $70,000. There will also be stables 42 x 150 feet. The dairy building will be two stories, the front of cut stone and pressed brick. Work will probably be commenced this month.—It is understood that the Ontario Government are considering the advisability of building a new asylum outside the city limits.—The Board of Control will receive tenders up to February 6th for the following works: The supply, fixing and fitting of eight steel roller blind doors on the north St. Lawrence Market building; the removal of the present fixtures and fittings and the complete supply and installation of metallic vault fixtures and fittings in the western division of the Toronto Registry Office; the supply, fixing and fitting of a four rail Baird adjustible snow guard on the north and south St. Lawrence Market buildings; the removal of the galvanized iron gutter and moulding on the east and west sides of the north and south St. Lawrence Market buildings, and

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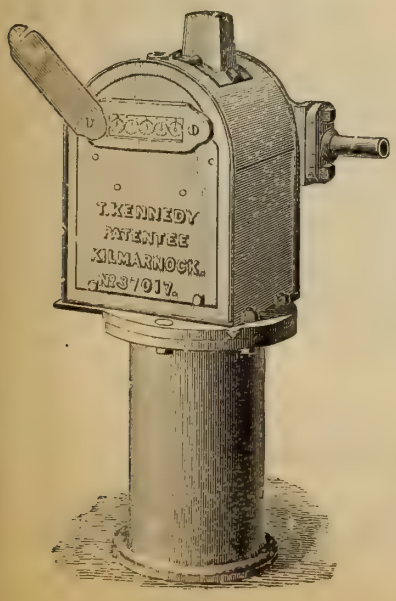

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							Neat.					3 (Sand) to 1 (Cement)				
					Initial	Final	1 dy.	7 dys.	28 dys	3 mos.	1 yr.	1 dy.	7 dys	28 dys.	3 mos	1 yr.
1903	20	O.K.	3.135	2.1	162	345	307	701	783	827	*	74	214	299	367	*
1904	44	O.K.	3.150	2.0	132	342	300	744	848	914	938	86	62	354	401	427

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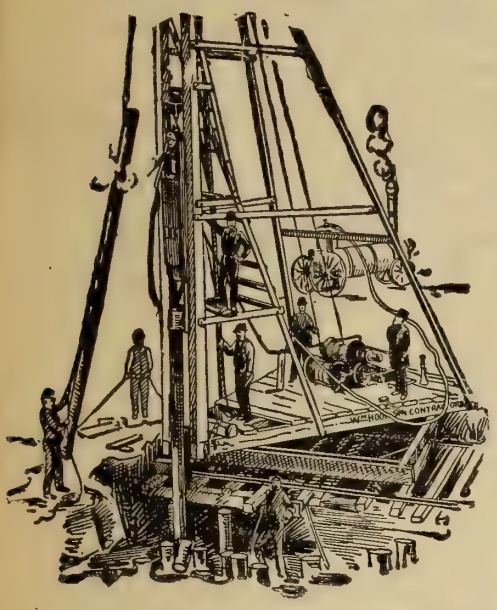

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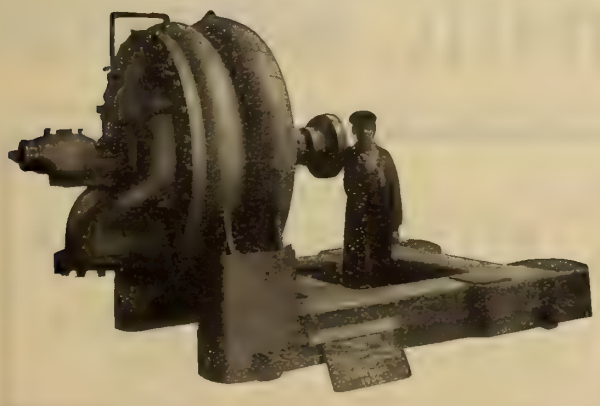

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the placing and fitting of a new gutter and moulding; the supply of lead pipe, lubricating oils and bo ler purger.—Plans for the new Knox Presbyterian church are now under consideration and it is expected that a decision will be reached in the near future.—The Council are about to undertake the construction of asphalt pavements on the following streets: Bernard avenue, from St. George street to Spadina road, cost $5,206; Birch avenue, from Yonge street to west end, cost $8,381; Delaware avenue, from Bloor to Shanley street, cost $7,202, and from Shanley to Van Horne street, cost $13,106; Hepbourne street, from Ossington avenue to Dovercourt road, cost $5,425. A brick pavement will be constructed on Charlotte street, from King to Adelaide street, cost $3,734.—Tenders will be received by the Board of Control up to Tuesday, February 6th, for the construction of the following sewers: Shaw street, from Bloor to Dupont; Grace street, from a point 970 feet north of College street to 500 feet further north. It is also proposed to construct an 18 inch tile pipe sewer on Avenue road, from St. Clair to Lonsdale avenue, at a cost of $4,500.—A. W. Holmes, architect, is asking for tenders up to 27th inst. for erection of St. Peters church, Bloor street west.—Charles F. Wagner, architect, has prepared plans for the Kew Beach Presbyterian church to be built on corner of Queen street and Winnifred avenue, at a cost of $10,000.—Dr. Sheard has decided to recommend that a crematory be erected in the northwestern section of the city.—The Board of Control has recommended that the city purchase a fire hall site on the north side of Adelaide street, between York and Simcoe streets.—Building permits have been granted as follows: Bond & Smith, two-storey and attic brick dwelling, 57 Admiral road, $5,500; J. T. Montgomery, two-storey brick dwelling, stone foundation, Thorne street, $2,000; W. J. McGowan, 2½-storey stone and brick dwelling, corner Bathurst and Herrick streets, $3,000; W. J. Greenway, 2½-storey brick dwelling, Pearson avenue, $3,500; Toronto General Hospital, alterations to building, Gerrard street east, $4,000; Home Bank of Canada, three-storey and basement stone and brick bank, corner Queen and Bathurst streets, $15,000; Mrs. H. Austin, 2½-storey brick dwelling, corner Prince Arthur avenue and Bedford road, $9,000; Charles Mould & Co., three attached two-storey roughcast dwellings, Franklin avenue, $3,600; Fred W. Cox, two-storey stone and brick drug store, butcher shop and stable, 219-221 Pape avenue, $4,000; D. Caplan, 2½-storey brick store and dwelling, stone foundation, 128 Elizabeth street, $4,000; Ontario Wind Engine and Pump Co., three storey and basement brick factory, corner Liberty and Jefferson, $8,000; W. J. Thompson, pair 2½ storey brick veneer dwellings, 564-566 Deleware avenue, $3,800; Miss Thomas, two-storey brick dwelling, 23 Lindsay avenue, $2,900; T. McNea, pair two-storey roughcast buildings, brick fronts and foundation, Brooklyn avenue, $2,400; Bell Bros., pair two-storey brick and wood dwellings, Ritchie avenue, $4,000; J. Bryant, three two-storey and attic stone and brick dwellings, Grace street, $6,000; Nat Ray, pair 2½-storey brick dwellings, 1419-1421 Queen street east, $4,400; E. C. Tuckett, two-storey and attic dwellings and stores, brick and cement, corner Conduit and Dundas streets, $5,000; H. M. Deeth, pair 2 1/2-storey brick dwellings, Deleware avenue, $4,200; John J. McKinney, four pair 2½ storey brick dwellings, Grace street, $20,000; Toronto Railway Company, two-storey concrete and brick waiting room and office, corner of Dundas street and Howard Park ave., 3,230; Edmund Elliott, pair two-storey brick dwellings, stone foundations, 15-17 Beatrice street, $5,000.—New tenders are invited by the Board of Control up to Thursday, February 8.h, for the excavation, carpenter work, etc., for the new Ferry buildings.

CONTRACTS AWARDED.

FORT FRANCIS, ONT.—Cold storage warehouse for L. Christie: J. F. McKenzie, contractor.

WHITBY, ONT.—The Keystone Sugar Company have let the contract for a sugar factory to cost $150,000.

GLACE BAY, N.S.—Hotel at Reserve Mines for Dominion Coal Company: William Curry, contractor.

MONTREAL, QUE.—John Allan & Sons have been awarded the contract for roofing the wing of the Windsor Hotel destroyed by fire.

MITCHELL, ONT.—A. Hill & Company have secured the contract for an overhead bridge in Grey township, 93 feet in length, concrete floor, cost about $1,800.

PARRY SOUND, ONT.—The tender of Allis-Chalmers-Bullock, Limited, Montreal, has been accepted for supply of a generator for the municipal lighting plant, at $6,600.

VICTORIA, B. C. — The Victoria Machinery Depot have secured the contract for building a large barge for the E. & N. Railway Company, price about $50,000.

NIAGARA FALLS, ONT.—The contract for heating the General Hospital has been let to James Smart Manufacturing Company, Brockville, at $1,550. The R. F. Carter Electric Company will furnish the electric equipment, at $400.

FORT FRANCIS, ONT.—The Atikokan Ore Company will push the work on their blast furnaces. Contracts for structural steel work have been awarded to the Canada Foundry Company, Toronto, Caledonian Iron Works, Montreal, and the Canadian Bridge Company.

WINNIPEG, MAN.—Marchand & Haskell, architects, have awarded the contract for the construction of the St. Boniface cathedral to Senecal & Smith, of St. Boniface, at $225,000, exclusive of heating, lighting or furnishing. The contract for the cut stone and mason work has been given to the Winnipeg Stone Company. The work will be commenced immediately.

BIDS.

OTTAWA, ONT.—The following tenders were received for masonry and carpentry work of Fat Stock Show building: Masonry, brick work, etc.—Alex. Garvock, with brick walls, $20,950; with red instead of gray facing, $22,426; with gray block walls, $21,496; gray block walls, red facing (specification), $22,971. Carpentry—August Boehmer, $9,965; Christin & McCready, $10,233; A. G. Marshall, $10,250. New tenders will likely be invited.

FIRES.

Yards and plant of the Manitoba Lumber Company, Carman, Man., totally destroyed; loss $10,000.—Grand Trunk Railway station, freight shed and agent's residence at Aylmer, Ont., totally destroyed.—Seiling's saw mill at Eagle Lake, Ont.; loss $6,000.—Furniture store of Walter Tait, Perth, Ont.; loss $3,000.

A. N. Bail, contractor, Maisonneuve, Que., is reported to have assigned.

The death occurred last week of John Bruce, contractor, Ottawa, at the age of 55 years.

The annual meeting of the Edrans-Brandon Pressed Brick Company was held at Brandon, Man., last week, when directors were elected for the ensueing year. R. S. Thompson is president, Rober Sword vice-president, and E. H. Johnson, secretary-treasurer.

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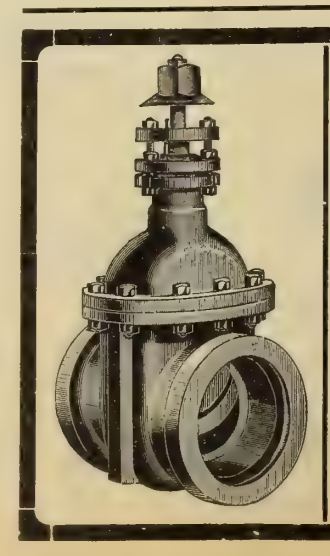

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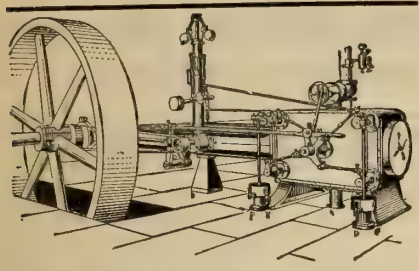

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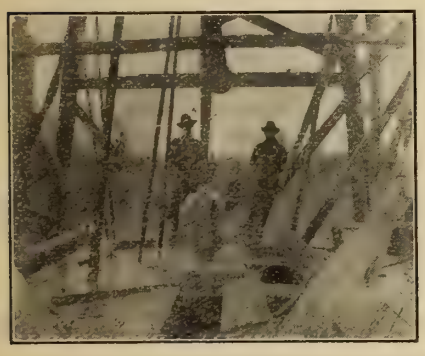

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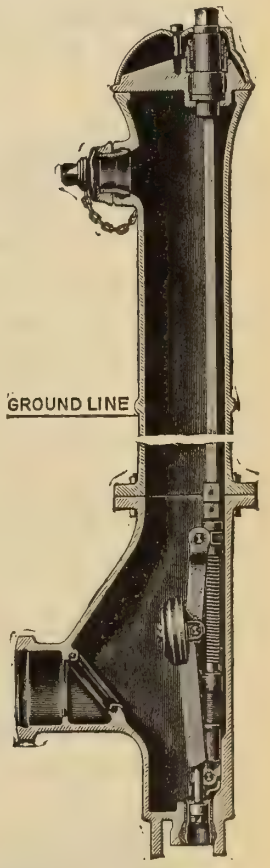

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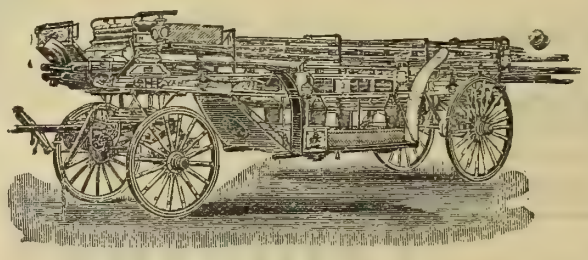

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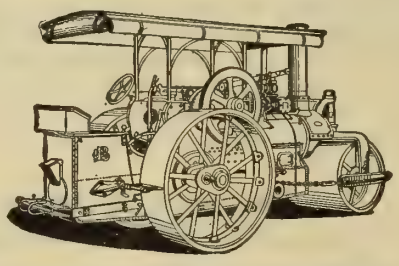

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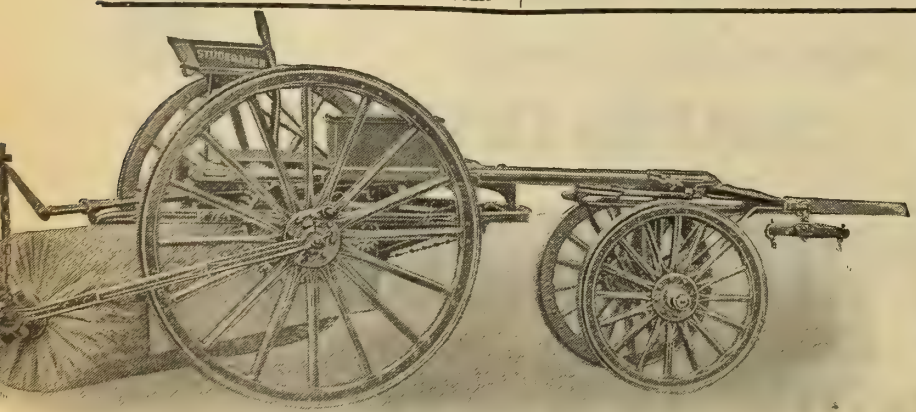

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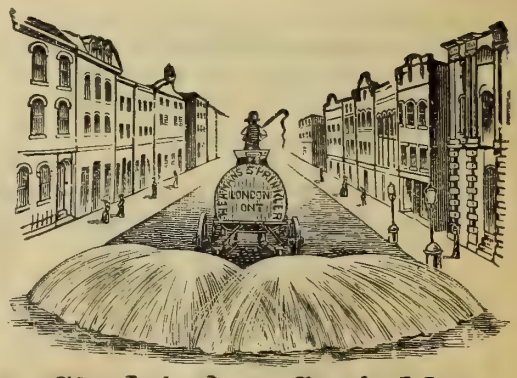

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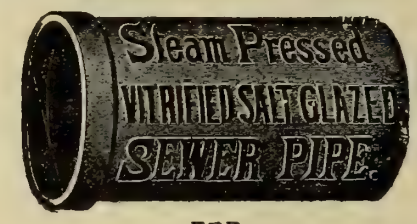

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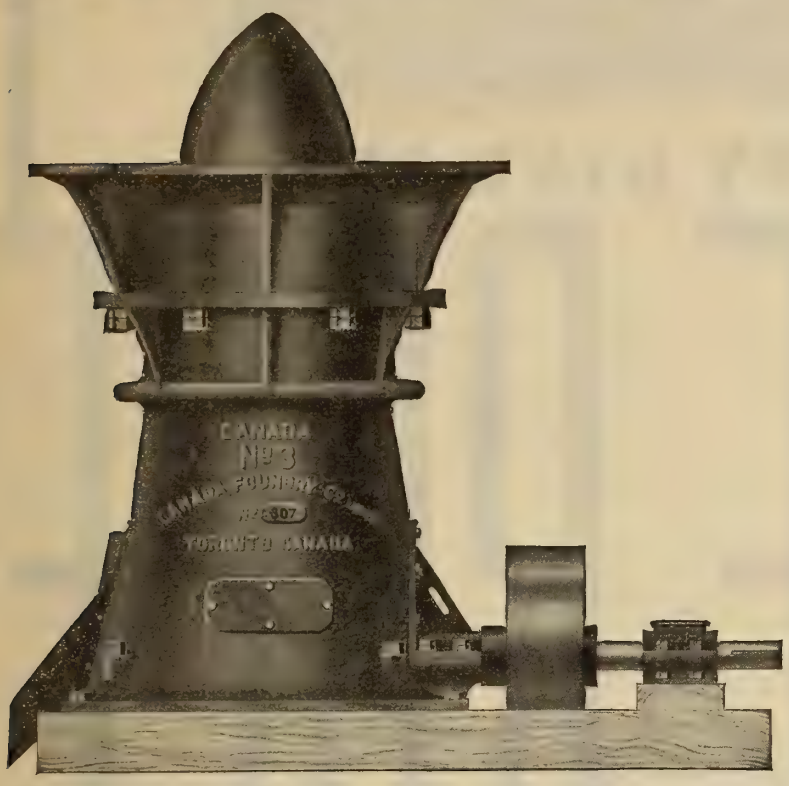

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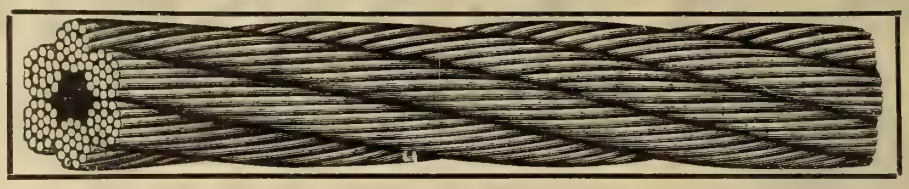

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VOL. 16. TORONTO, MONTREAL — JANUARY 31, 1906 — WINNIPEG, VANCOUVER No. 48

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Sealed tenders will be received by the undersigned up till noon FEBRUARY 15TH, 1906, for $15,000 4½ per cent. debentures. No tender necessarily accepted. For further particulars apply to

E. DONNELL,
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Barrie, January 20th, 1906.

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NOTICE

Sealed tenders will be received by the Secretary of the Board of Commissioners for E. L. & W. W. until 6 p.m. on

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for furnishing One Alternator of 175 k w. capacity, and other necessary Power House Equipment, Enclosed Arc Lamps, Wiring, etc.

General specification, forms of tender, and skeleton plan of the town may be seen at the office of the Secretary of the Board of Commissioners for E. L. & W. W. at Picton, or at the office of the Chief Engineer, 103 Bay Street, Toronto.

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To Contractors

Tenders will be received by the undersigned up to 5 o'clock p m. on WEDNESDAY, FEBRUARY 7TH, for the various trades, except heating, required for additions and alterations to Hotel building at corner of Queen Street and Beaconsfield Ave., Toronto. Tenders separate or in bulk. The lowest or any tender not necessarily accepted.

A. W. HOLMES, Architect,
10 Bloor St. East, Toronto.

TENDERS WANTED

Bulk or separate, sealed tenders, marked "Tenders" on envelopes, will be received by the undersigned up to six o'clock p.m. on THURSDAY, THE 15TH DAY OF FEBRUARY, A.D., 1906, for the following trades required in the erection and completion of a Methodist Church for the Eastern Methodist Congregation of Napanee, Ontario, viz., masonry and brickwork; carpenter and joiner work; lathing and plastering work; steam heating; hot air heating; plumbing; metal work; painting and glazing Plans and specifications for same may be inspected at the office of B. Dillon, Architect of Brockville, Ontario, or at the office of the undersigned.

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W. F. HALL,
Secretary Building Committee,
Napanee, Ont.

Dated this 25th day of January, A D, 1906.

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Applications for the position of Resident Engineer of the Town of Portage la Prairie will be received up to FEBRUARY 2ND, 1906. Duties to commence on April 1st.

By order,

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Portage la Prairie, Jan. 9th, 1906.

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Sealed bids will be received by the undersigned up to 12 o'clock on WEDNESDAY, FEBRUARY 7TH, for all trades required in the Erection of a Residence in MacPherson Avenue East.

Plans and specifications can be seen at the office of the Architect, to whom tenders are to be addressed.

The lowest or any tender not necessarily accepted.

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TENDERS FOR PORTLAND CEMENT

Sealed tenders, addressed "S. R. Armstrong, City Clerk, Peterborough, Ont.," and endorsed "Tenders for Cement", will be received up to FEBRUARY 20TH, 1906, for supplying 4,000 barrels more or less of Portland Cement. Tenderers will state whether cement is packed in sacks or barrels, net weight per sack or barrel, and price f.o.b. Peterborough. Sample tests will be made from consignments before acceptance. Delivery to commence not later than May 2nd, 1906. A marked cheque for an amount equal to 5 per cent. of total contract must accompany each tender. Specifications furnished on application. The lowest or any tender not necessarily accepted.

S. R. ARMSTRONG,
City Clerk.

CITY OF REGINA

Tenders for New City Hall

The Corporation of the City of Regina will receive sealed tenders, marked "Tender for New City Hall", up till noon of FRIDAY, 16TH FEBRUARY, 1906, for the construction of a new City Hall in the City of Regina, Sask., according to plans and specifications prepared by Messrs. Dodd & Hopkins, Architects, Calgary, which may be seen at their offices at Regina, Sask., and Calgary and Edmonton, Alta., as well as at the Builders' Exchange in Winnipeg, Toronto and Montreal.

Each tender to be accompanied by a certified cheque drawn upon any chartered bank of Canada payable to the order of the City of Regina to the extent of 5 per cent. of the total amount of such tender, which will be forfeited should the Contractor fail to enter into a satisfactory contract when notified to do so.

The Contractor whose tender is accepted will be required to furnish a bond for $30,000.00 or three sureties for $10,000.00 each satisfactory to the City Council.

The City Council reserve the right to reject any or all tenders.

J. KELSO HUNTER,
Secretary-Treasurer.

Regina, Sask., 24th January, 1906.

CONTRACTS OPEN.

GRANDE BAIE, QUE.—Price Bros. will erect a pulp mill here.

HESPLER, ONT.—The Methodist church here will be enlarged.

SELKIRK, MAN.—Plans will be procured at once for a new school.

GAINSBOROUGH, SASK.—A new Baptist church will be built here.

PICTON, ONT. — A new heating system will probably be installed in the public school.

PORT STANLEY, ONT. — The Council are considering a proposition for electric lighting.

KAMLOOPS, B. C.—The waterworks nd electric light by-laws were defeated here last week.

LETHBRIDGE, ALTA. — Piche & Miron will build a two-storey store on Round street.

QUEBEC, QUE.—The erection of an Anglican church on Maple avenue is under consideration.

STRATFORD, ONT. — The Grand Trunk shops here will be enlarged, at an estimated cost of $75,000.

HARROW, ONT.—Tenders are being taken by Rev. Father Reneaud for erection of R. C. presbytery.

CORNWALL, ONT. — The McGill Chair Company will shortly proceed with the erection of a factory.

SARNIA, ONT.—Tenders have just been taken for the construction of a sewer on Kathleen avenue.

SASKATOON, SASK.—J.W.Stewart, of the Frost & Wood Company, purposes building on First avenue.

PRESTON, ONT.—Boring is taking place in connection with the proposed waterworks system here.

ORILLIA, ONT.—The Buffalo Ice Company will build a warehouse here 400 x 100 feet and 40 feet high.

NELSON, B. C.—The British Columbia Government has been petitioned to build a new court house here.

GLACE BAY, N.S.—The Dominion Coal Company contemplate building a large number of miners's houses.

SHERBROOKE, QUE.—The Sherbrooke Power, Light & Heat Co. intend making improvemeuts to their power house and plant.

NEEPAWA, MAN.—A site for the proposed post office has been selected on the east side of Mountain avenue.

GODERICH, ONT.—J. A. Fowler, architect, has prepared plans for remodeling and improving the town offices.

BRANDON, MAN. — The Rat Portage Lumber Company will erect a four-storey warehouse here in the spring.

PRINCE ALBERT, SASK. — The Council have decided to offer a free site for the Provincial Government building.

PORT ARTHUR, ONT.—The Council have appointed a committee to report on the extension of the municipal power plant.

SARNIA, ONT. — M. R. Burrowes, architect, has been instructed to prepare plans for additions to the public library building.

PETROLEA, ONT. — The Town Council have agreed to provide the sum of $17,000 for the erection of a new central school.

COOKSHIRE, QUE. — The ratepayers have approved of a by-law to aid J. T. Brock and associates to extend their foundry.

BERLIN, ONT.—The Berlin Rink & Auditorium Company have decided to install an artificial ice equipment costing probably $8,000.

PEMBROKE, ONT. — J. Newton Ker, C.E., of Ottawa, has been engaged as engineer for the construction of proposed intake pipe.

MILTON, ONT. — Halton County Council have unanimously decided to proceed at once with the erection of a House of Refuge in this town.

FORT WILLIAM, ONT,—James D. McGregor and John C. Murray contemplate erecting two office and store buildings on Victoria avenue.

GUELPH, ONT.—L. C. Wideman, architect, has taken tenders on alterations and additions to the store premises of E. R. Rollerot & Company.

FOREST, ONT. — R. W. Fawcett, architect, of Sarnia, is preparing plans for extensive alterations to James Maylor & Sons' departmental store.

WATERLOO, ONT.—W. C. Bechtel has purchased 14 acres of land and intends erecting a modern brick making plant costing about $12,000.

WALKERTON, ONT.—The Chairman of the Fire & Water Committee will submit a report to the Council on the cost of installing water meters.

KINGSTON, ONT.—H. P. Smith, architect, is taking tenders up to February 3rd for erection of club house for the Kingston Yacht Club Association.

DIGBY, N. S.—Steps are being taken to secure the erection of a new court house and jail. Plans for same have been prepared by F. R. Fairn, architect.

ARNPRIOR, ONT.—The Diamond Park Mineral Water Company intend building large bottling works this spring on corner of John and William streets.

STRATHCONA, ALTA.—A by-law will be submitted to the ratepayers to issue debentures for $35,000 for a waterworks pumping engine and other plant.

ROSSLAND, B.C.—It is stated that the Canadian General Electric Company have bought a site here on which to erect a plant for the manufacture of mining machinery.

STURGEON FALLS, ONT. — M. Healy, of Smith's Falls, was here last week in connection with plans for a new hotel to be built on corner of King and John streets.

McIVER, ONT.—John McIver, Indian Agent here, will receive tenders up to Wednesday, February 28th, for erection of a church building on the Cape Croker Indian Reserve.

ORANGEVILLE, ONT.—The Hendrel Manufacturing Company have purchased the Orangeville Furniture Company's factory and intend building an addition in the spring.

ESSEX, ONT. — The Road and Bridge Committee of the County Council have recommended the construction of a steel bridge over the Canard river, at a probable cost of $5,000.

NEW LISKEARD, ONT.—W. A. Middleton is promoting a company to establish a plant for the manufacture of paint from galena. It is proposed to build a crusher at Cobalt and a factory at this place.

PORTAGE LA PRAIRIE, MAN.—It is probable that a by-law to empower the Council to issue $50,000 of debentures to complete the waterworks system will be submitted to the ratepayers early in the spring.

EAGLE CREEK, SASK. — Tenders are invited by H. Jeffreys de Winton up to February 6th for erection of school house, and up to February 15th for purchase of $1,500 ten-year school debentures.

EAST TORONTO, ONT.—The Dominion Bank have leased a site on the south-east corner of Queen street and Broadview avenue and intend building thereon a branch bank costing not less than $12,000.

UXBRIDGE, ONT. — The Town Council have appointed a committee to engage an engineer to report on a waterworks system, and another committee to report on the probable cost of building an Isolation hospital.

PORT ARTHUR, ONT.—Hedges & Burleigh, of Boston, have entered into an agreement with the Town Council to establish large steel tube works here costing about $700,000. The Town will give them a site of 100 acres.

ST. CATHARINES, ONT.—It is expected that work will shortly be commenced on the proposed improvements to the police station. The plans as prepared by A. E. Nicholson, architect, show that the cost will be about $6,000.

REGINA, SASK.—F. Gelinas, Secretary Department of Public Works, Ottawa, will receive tenders up to Friday, February 23rd, for the construction of post office building here. Plans on application to W. T. Mollard, Clerk of Works.

INNISFAIL, ALTA. — The School Board are considering plans for a $30,000 brick school building here.—A by-law is being prepared to raise $8,000 for fire protection. — H. McDermott, jeweller, will erect a large business block this spring.

GRAND FALLS, N. B.—The concrete dam proposed to be constructed by the Grand Falls Power Company will be 540 feet long between abutments and 28 feet high. It is understood that the Provincial Government will shortly approve of the plans.

APPLE RIVER, N. S.—The Department of Public Works, Ottawa, are asking for tenders up to February 19th for the construction of a breakwater at this place. Plans at offices of C. E. W. Dodwell, Resident Engineer, Halifax, and on application to the Postmaster.

OWEN SOUND, ONT.—The question of erecting a new public building for the joint use of the Town and County is being discussed.—The Electric Light & Power Committee will no doubt consider at an early date the question of extending the electric light plant.

WATFORD, ONT.—The Lloyd Automatic Wire Weaving Company, of Toronto, have made a proposition to the Village Council to establish a factory here for the manufacture of mattresses, hammocks, etc. They would erect a cement factory building 50 × 150 feet.

HAMILTON, ONT. — The City Council propose to construct pipe sewers on Bold street, Caroline to Hess street, cost $552, and on Sherman avenue from Barton to Wilson street, cost $2,092.—The Sewers Committee have decided to build the overflow sewer by day labor.

MEAFORD, ONT.—William E. Long will receive tenders up to February 5th for erection of a brick school house, with stone basement, for School Section No. 5, St. Vincent.—The Town Council have resolved to purchase additional pumping machinery for the waterworks power house.

VICTORIA, B.C.—T. D. Sedger, architect, has prepared plans and taken tenders for a residence at the Gorge.—At a joint meeting of the various boards of the province held recently, Rev. A. J. Saunders proposed a plan to build a summer residence in the Okanagan Valley, to be used as a Baptist College; estimated cost, $25,000.

DRUM HEAD, N. S.—Tenders will be received at the Department of Public Works, Ottawa, up to February 19th for the construction of an extension to the breakwater here. Plans at offices of the following: E.D. Milledge, Antigonish; C. E.W.Dodwell, Halifax; James McLellan, Postmaster, Goldboro.

CALGARY, ALTA. — The City Engineer is preparing plans and specifications for a road roller and rock crusher,

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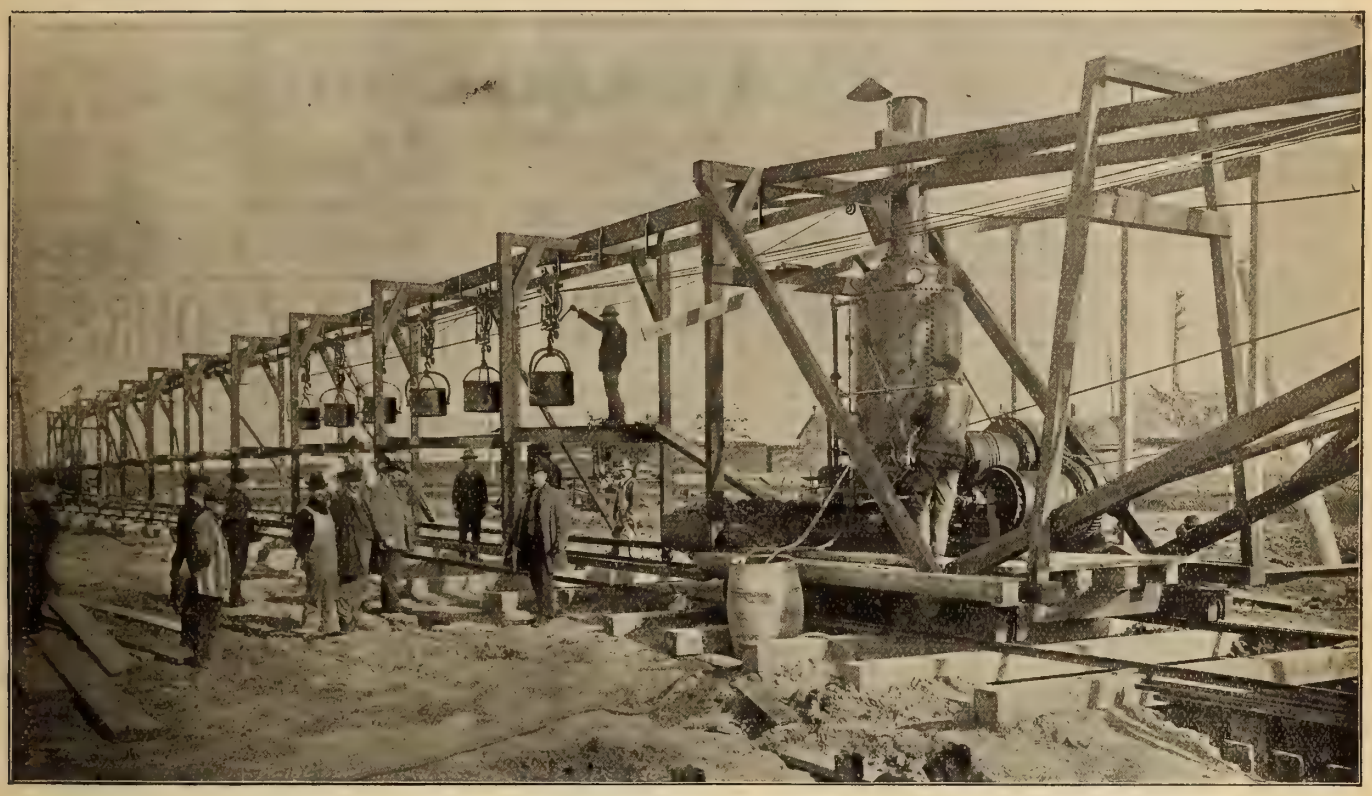

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MONTREAL

for which tenders will be invited.—It is probable that the Board of Trade will erect a new building this year.—On January 25th the citizens voted in favor of raising $90,000 for erection of two more schools.—The Brackman-Ker Milling Campany will build a mill here to manufacture breakfast cereals.

AMHERST, N. S. — Engineer Barbour, of Boston, has reported to the Town Council that the cost of bringing a gravity system of waterworks from the south branch of the Maccan river would be between $300,000 and $400,000. He suggests the installation of pumps at the reservoir and the construction of storage dams to tide over the dry season. He will submit a full report on the latter plan.

EDMONTON, ALTA.—The Alberta Milling Company are preparing to build a large warehouse.—The Canadian Pacific Railway contemplate erecting a one and a half storey brick block in this city for the location of freight, ticket and telegraph offices.—R. P. Inglis, of Montreal, is desirous of reopening negotiations with the city for the construction of a street railway. The City Council are considering the construction of an electric railway to be operated under municipal control.

PETERBORO, ONT.—Allan Hazen, C.E, New York, has presented a report to the Water Commissioners recommending the installation of a sand filter costing $80,000, and the construction of a concrete dam on the Otonabee river costing about $100,000.—It is estimated that an overhead bridge at Hunter street, the construction of which is under consideration, would cost $60,000.— The County Council have definitely decided to erect a House of Refuge, at a cost of $30,000.—The Dominion Radiator Company, Toronto, are negotiating with the city with a view to the erection of a factory here.

FREDERICTON, N. B. — C. H. LaBillois, Commissioner of Public Works, desires tenders by Thursday, February 15th, for building masonry substructure and approaches for two steel superstructure spans of 114 feet for Jacquet river bridge, Restigouche County. Plans at the Public Works Department, at office of F. H. McLatchy, M. P. P., Campbellton, at the Dalhousie Mercantile Company's office, Dalhousie, and at the post office, Charlo Station. — Engineer Barbour will shortly submit his report on the waterworks situation. He will probably recommend a mechanical filtration plant.

NEW WESTMINSTER, B. C.—The Vancouver, Westminster & Yukon Railway have declared their intention of building a branch from this city to Millside, and also of extending their line from Tenth street westward. The plans for the large docks and warehouses to be erected by this road have been filed at the City Hall. They provide for docks 500 feet long and 100 feet wide and for a galvanized iron warehouse 150 x 50 feet.

ST. JOHN, N. B. — At the annual meeting of the Maine & New Brunswick Power Company held in this city last week, it was stated that nearly all the stock had been subscribed for and that the work of installing the plant would be commenced forthwith. This company propose to generate electric power at Aroostook Falls and distribute it in Maine and the counties of Victoria, Carleton and Madawaska, N. B. L. G. Crosby and J. D. Seely, of this city, are interested.—The Mowry Safety Nut Company have undertaken, in the agreement with the city, to expend $50,000 on their works during the first year and a further sum of $100,000 within five years.

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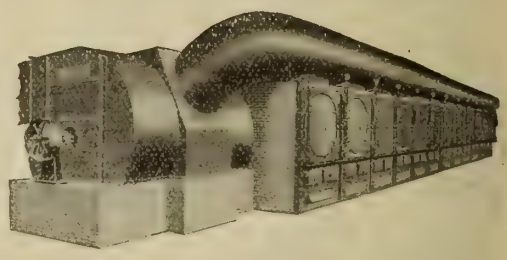

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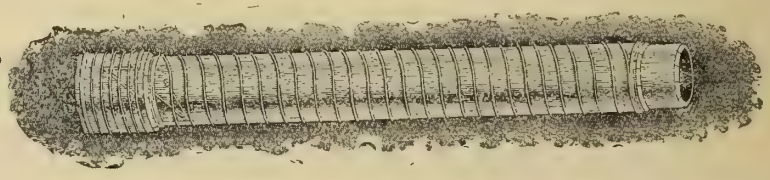

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BRANTFORD, ONT.—The Brantford Screw Company will issue new stock and build a large addition to their factory.

TORONTO JUNCTION, ONT.—Superintendent Haggas, of the Waterworks Department, has recommended the purchase of a new pump costing $10,000 and the extension of the intake pipe, at a cost of about $50,000.

BELLEVILLE, ONT.—The Lehigh Portland Cement Co., who have purchased a location near this city, will shortly be incorporated as a joint stock company. They intend to commence the erection of their plant and buildings the beginning of April and to be running by the fall.—It is rumored here that a syndicate are negotiating for the purchase of the rolling mills and that the mills will be reopened ia about a month. — The County Council have instructed G. M. Miller, architect, of Toronto, to prepare plans for the House of Refuge to be built by Hastings County ; estimated cost, $30,000.

MONTREAL, QUE.—Mark Fisher, Sons & Company are about to erect a fireproof building on the south west corner of Victoria Square and Craig street.—Interests allied with the American Steel Foundries Company have organized the Dominion Steel Car Company, Limited, for the manufacture of steel cars, and in the spring will commence the erection of a plant at Montreal West.—Ross & Holgate have been engaged by the City Council of St. John, N.B., to furnish an estimate of the cost of an electric plant for lighting the streets and public buildings.—Plans are said to be in course of preparation for a large departmental store to be built on the property at corner of Peel and St. Catharine streets recently purchased by the Robert Simpson Company, of Toronto.

LONDON, ONT.—The London Loan Company have made an offer for the Oddfellows' Hall, corner Dundas street and Park avenue, and if secured will remodel the building.—The congregation of Chalmers Presbyterian church are taking steps towards the erection of a new edifice.—The County Council have decided to construct a 70-foot steel bridge at the foot of the south hill on Bear Creek, also a 40-foot bridge opposite lot 1, concession 7, West Williams, and a 20-foot bridge opposite lot 9 on the same concession.—Manager McGuigan, of the Grand Trunk Railway, has informed Mayor Judd that the company will spend

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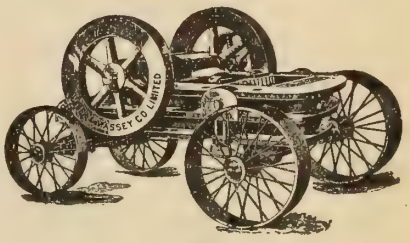

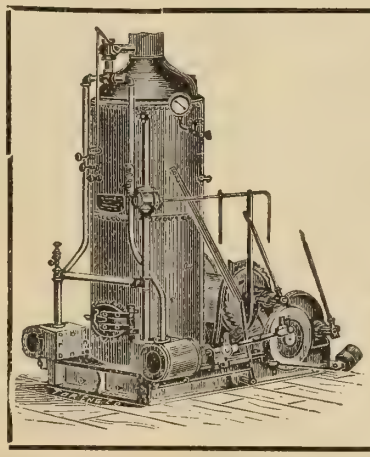

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$1,000,000 here the coming season. A new station, the raising of tracks, extension of yards, and building of subways are included in the scheme.—The County Council last week approved of the good roads scheme and will spend $9,000 this year. The Sylvan bridge will be built. —A. O. Graydon, City Engineer, will receive tenders up to 4 p. m. February 1st for cement sidewalks, cement curb and gutter, lumber, gravel, stone, glazed tile, concrete tile, Portland cement, iron castings, etc.

VANCOUVER, B. C.—George Eastbrooke, of Tweed, Ont., has arrived here for the purpose of establishing a flour mill.—It is learned from an authoritative source that the Vancouver, Westminster & Yukon Railway Company will this summer commence the construction of the projected line from Vancouver northward to tap the Grand Trunk Pacific Railway.—The Merchants Bank of Canada will open a branch on the north-west corner of Hastings and Carrall streets and will spend about $25,000 in remodeling and extending the building. Another storey will be added and an electric elevator installed.—It is reported that the British Columbia Government have obtained an option on the entire block owned by the C. P. R. west of the Vancouver Hotel, the intention being to build a new court house thereon.—J. J. Donnellan, of Seattle, has prepared plans for proposed alterations to the People's Theatre.—Dalton & Eveleigh, architects, are preparing plans for a four-storey brick business block to be built on Hastings street, between Cambie and Abbott streets, for E. E. Hewson, of Amherst, N.S.; estimated cost, $40,000.

OTTAWA, ONT.—E. L. Horwood, architect, is preparing plans for a five-storey brick building to be erected on corner of Bank and Queen streets by J. C. Brennan, stores on the ground floor and offices above, cost about $65,000. Construction will begin in May.—Tenders will shortly be invited for the erection of a new conservatory in the Government House grounds. A new sandstone front and other improvements will be made to Rideau Hall, at a cost of about $150,000.—Plans of breakwater to be constructed at Apple River, N. S., may be seen at the Department of Public Works, this city. Tenders close February 19th. —Work will be commenced in the spring on the erection of a Sunday school hall in connection with St. George's church, Metcalfe street, to be 52 x 80 feet. Tenders will be called for as soon as possible. —The first tenders for the construction of the National Transcontinental Railway will be invited immediately, these to include the eastern section from the Quebec bridge to the St. Maurice river, a distance of about 150 miles, and the western end of the line from Winnipeg east to Superior Junction, about 240 miles. It is understood that tenderers will be requested to submit one tender covering the entire work on each of these sections.—The Building Committee of the Public School Board have recommended the following additions to schools: Four rooms to Creighton street school, cost, $18,000; eight rooms to Osgoode street school, costt$45,000; six rooms to Elgin street school, cost $32,000.

WINNIPEG, MAN.—The quarterly official board of Young Methodist church have decided to make preparations at once for the erection of a $35,000 church, of brick with stone facings. Several architects will submit plans within a fortnight. Rev. T. E. Holling is pastor.—The work of excavating for Pulford's six-storey block on Donald street, north of Portage avenue, will be commenced about March 1st.—The Nassau Baptist church will be enlarged.—A building will be erected for the British and Foreign Bible Society.—The Health Committee have decided to build four new cells in the crematory, at a cost of $8,000. The question of the disposal of garbage has been referred to a sub-committee, with instructions to report at an early date.—A survey party, under S. H. Reynolds, assistant city engineer, has gone to Lac du Bonnet to make a general survey of the Seven Portages and the Point Des Bois falls, on Winnipeg river, in connection with the proposal of the city to develop electric power.—A sewer will be constructed on Logan avenue, McPhillips street to Quelch street, at a cost of $13,684, and an asphalt pavement on Ellice avenue, from Maryland to Simcoe streets, cost $11,942.—The T. Eaton Company propose extending their store in the spring.—J. Woodman, architect, is taking tenders up to Saturday, February 17th, for erection of new stores for the Hudson's Bay Company at Lethbridge and Macleod and for additions to their premises at Calgary.—The Rat Portage Lumber Company will build a warehouse on corner Pacific avenue and Sixth street, 150 x 120 feet, four stories.

TORONTO, ONT. — M. Bachrack, proprietor of the Bachrack store at corner of Yonge and Albert streets, has leased for twenty-one years 67 feet of land immediately north of the Bank of Montreal building at corner of Yonge and Queen streets, and 103 feet on Queen street immediately east of the Bank's property. Mr. Bachrack is now having plans prepared for a large store to be built on this site.—The Minister of Public Works, Ottawa, has approved of the plans for the new barracks in this city for the permanent corps and in the course of a few days tenders will be invited. The buildings are to be erected on Jane street, adjoining the Humber river.—Surveys are now being made for the forty miles of the Temiskaming & Northern Ontario Railway that will terminate at the junction point of the Grand Trunk Pacific. — About $160,000 has been secured towards the scheme of new residences for the University of Toronto. Plans are now being prepared for four separate three-storey buildings and it is hoped to be able to commence the work at an early date.—Thomas Jenkins has purchased the property at the south-west corner of Yonge and Buchanan streets and has had plans prepared for a new building facing on Yonge street and another on Hayter street running north to connect with the main building.—The erection of a new church is being considered by the authorities of St. Johns Presbyterian church. — The Board of Control will receive tenders up to Tuesday, March 6th, for the construction of sewers, pumping stations, septic tanks and bacteria beds for a system of sewerage east of Woodbine avenue.—A. W. Holmes, architect, is taking tenders up to February 7th for additions and alterations to hotel building corner Queen and Beaconsfield avenue. —Plans of city hall to be erected at Regina, Sask., may be seen at the Builders' Exchange in this city. The architects are Dodd & Hopkins, of Calgary, and tenders close February 16th.—The University authorities have selected a site on the corner of Hoskin avenue and Queens Park Crescent on which to erect the new Household Science building, the gift of Mrs. Massey Treble to the University.—York County Council have made a grant of $2,000 for the construction of a bridge over the Holland river between Bradford and Queensville, this being two-thirds of the cos.—The Board of Control have decided tt erect a Press building on the Exhibitioon grounds, at a probable cost of $15,000.—G. M. Miller & Company, architects, have been commissioned to prepare plans for a House of Refuge for Hastings county, to cost about $30,00. — The congregation of Fern avenue Presbyterian church have had plans prepared for a new edifice, although it has not yet been definitely decided to build.—Tenders were recently asked for the building of cottages at Mimico Asylum, but as the tenders were considered high, the Government have decided to do the work by day labor.—The Board of Education have been requested to provide the following school additions: Dovercourt school, six rooms; Dewson street, Kew Beach and Withrow avenue, four rooms each; Brock avenue, two rooms, and Clinton street, one room.

CONTRACTS AWARDED.

MEAFORD, ONT.—The tender of W. C. Brent, Toronto, has been accepted for purchase of $9,076 town debentures, at a premium of $27.

NIAGARA FALLS, ONT. — The Niagara Falls Machine & Foundry Company have received a large order for castings for the Welland Canal.

HAMILTON, ONT.—The City has renewed the contract for sewer pipe with the Hamilton Sewer Pipe Company, at the same prices as last year.

TORONTO, ONT.—The York Township Council have accepted the tender of the Imperial Bank for $40,000 20 year 4½ per cent. debentures, at a premium of $1,100.

HULL, QUE.—The contract for supplying pipe for extension of the waterworks intake has been let to the Peterboro Pipe Company, at $77.78 a ton. About 42 tons will be required.

MONTREAL, QUE. — Aachibald F. Byers, B. Sc., 18 St. Alexis street, has been awarded the contract for the construction of the foundations for the new rolling mill plant of the Peck Rolling Mills Company, Mill street, this city.

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FREDERICTON, N.B.—The tenders received for pipe, castings, etc., for the new sewerage system, together with the names of successful tenderers, will be found below: Pipe—Hyde & Webster, Montreal, $14,497.40 (accepted); Jas. Robertson Co., Ltd., St. John, $15,945.12; J. S. Neill, Fredericton, $15,945.12; D. J. Shea, Fredericton, $16,240.09; John T. Farmer & Co., Montreal, $16,319.60; C. H. Peters' Sons, St. John, $16,450.74. Manholes, covers and steps—Jas. Fleming & Co., St. John, $2,041.20 (accepted); Montreal Pipe & Foundry Co., $2,377.50; St. John Iron Works, St. John, $2,406; McFarlane & Anderson, Ltd., Fredericton, $2,413.44; Union Foundry & Machine Works, St. John, $2,527.98; Brown Machine Co., Londonderry (N.S.), $2,566.50; Sessions Foundry Co., Bristol (Conn.), $3,055.80. Iron Castings—Montreal Pipe & Foundry Co., $809 (accepted); D. Y. Stewart & Co., Glasgow (Scot.), $896.25; John T. Farmer & Co., Montreal, $902. —Contracts for provincial works have been let as follows: Palmer's Mill pond bridge in Westmoreland county, to Whitman Brewer, of St. Marys; Goodwell bridge, in Restigouche county, to Joseph Goulette, of Charlo River.

NEW COMPANIES.

Canada Starch Company, Limited, Cardinal, Ont., incorporated, capital $2,500,000, to manufacture starch, glucose, etc. Directors, C. R. Hosmer and G. R. Benson, of Montreal, Joseph Ruddy, of Brantford, and others.

Loders Lime Company, Limited, Kananaskis, Alta., capital $100,000, to manufacture lime, cement, stone, etc., and to operate quarries. Promoters, J. S. Irwin, of Ottawa, John S. Cape, of Winnipeg, and others.

Reinforced Concrete Company, Limited, Montreal, incorporated, capital $200,000. Promoters, T. J. Donoghue and J. L. Goffette, of Montreal, A. W. Powell, of Ottawa, and others.

Canadian Dredge & Construction Company, Limited, Midland, Ont., capital $150,000. Directors, James Playfair, D. S. Pratt, Peter Potvin, D. L. White and W. J. Sheppard.

New System Brick Company, Limited, Brantford, Ont., incorporated, capital $50,000. Directors, C. W. Bush, J. L. Richardson and H. J. Wilson, of Toronto, and others.

Niagara Chemical Company, Limited, Toronto, incorporated, capital $40,000. Directors, T. H. Barton, F. D. Byers and O. F. Taylor, of Toronto.

Maybank Bronze Metal Company, Limited, Morrisburg, Ont., incorporated, capital $80,000. Directors, W. M. Maybank, H. H. Bradfield and C. A. Myers.

Ontario Sewer Pipe Company, Limited, Toronto, incorporated, capital $300,000. Directors, J. J. Zimmerman, Andrew Dods, J. A. MacIntosh, E. G. Morris and M. B. Peacock.

Toronto Show Case Company, Limited, Toronto, incorporated, capital $35,000, Directors, J. W. Kent, W. M. Peterkin, R. W. McLean and Harry Chinn.

Temagami Silver Mining Company, Limited, Sturgeon Falls Ont., incorporated, capital $150,000. Directors, Thomas Urquhart, Toronto, A. B. Gordon, Sudbury, and others.

Beaches Building Company, Limited, Toronto, incorporated, capital $80,000. Directors, J. M. Ross, G. M. Ritchie, F. W. Lyonde, W. J. Farmery and R. J. W. Barker.

Clarks Standard Developing Company, Limited, New Liskeard, Ont., incorporated, capital $40,000. Directors, J. J. Grills, R. B. Heron, and others.

Canadian Lock Nut Company, Limited, Toronto, incorporated, capital $300,000. Directors, A. G. Slaght, T. Monaham and S. P. Speerman.

Fletcher Manufacturing Company, Limited, Toronto, incorporated, capital $250,000, to manufacture bakers' tools and supplies, hardware, etc. Directors, Benjamin Fletcher, E. Whaley and E. B. Fletcher.

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							Neat.					3 (Sand) to 1 (Cement)				
					Initial	Final	1 dy.	7 dys.	28 dys	3 mos	1 yr.	1 dy	7 dys.	28 dys.	3 mos	1 yr.
1903	20	O.K.	3.135	2.1	162	345	307	701	783	827	*	74	214	299	367	*
1904	44	O.K.	3.150	2.0	132	342	300	744	848	914	938	86	62	354	401	427

* Tests for 1 year were not completed when records closed. 1905 report not yet issued.

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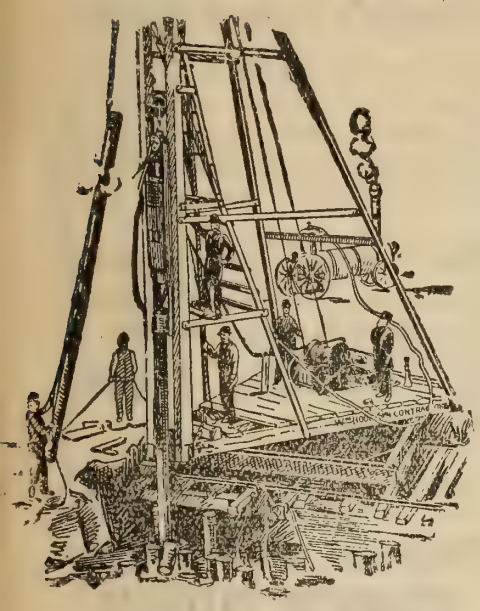

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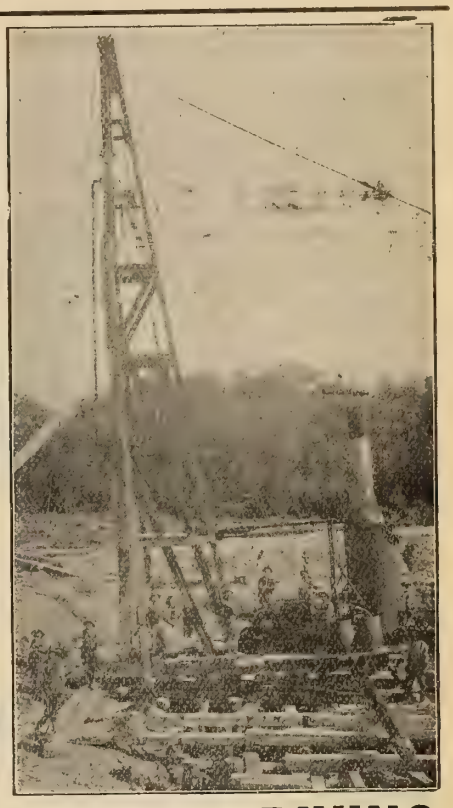

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Robert Gardiner & Sons, Limited, Montreal, incorporated, capital $140,000, to manufacture machinery, engineers' supplies, etc. Promoters, Robert Gardner, William Gardner, Daniel Currie and others.

Empire Construction Company, Limited, Montreal, incorporated, capital $1,000,000, to undertake public and private works. Promoters, V. L. C. de Buisserbt, B. C. Goffinet, Louis Goffin, Louis Grenier and others, of Brussels, Germany.

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In view of the progress that has been made in the past few years in the use of concrete reinforced with steel, a pamphlet recently issued by the B. Greening Wire Company, Hamilton, Ont., is of more than ordinary interest. It is devoted to wire bonding for concrete construction. The company make wire bonding of all strengths of material and in any lengths desired, the long lengths forming a continuous bond being features of their reinforcements. For the construction of culverts, tunnels, sewers, floors of bridges, etc., reinforced concrete is very suitable and has many advantages.

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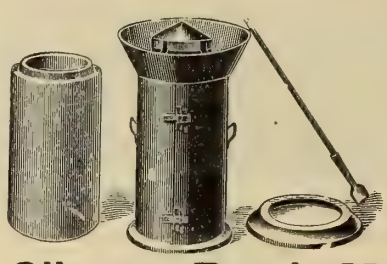

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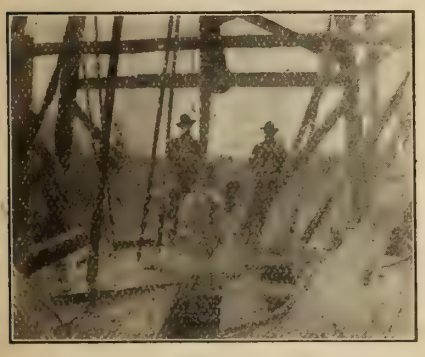

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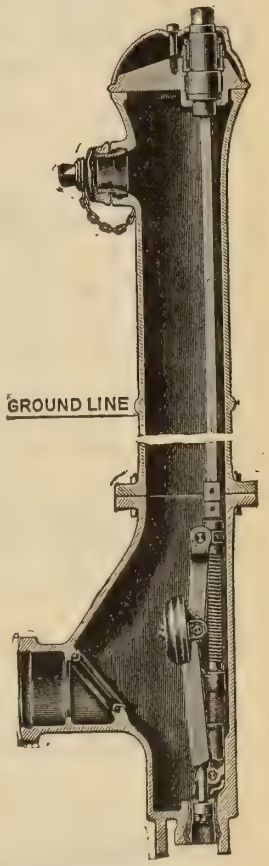

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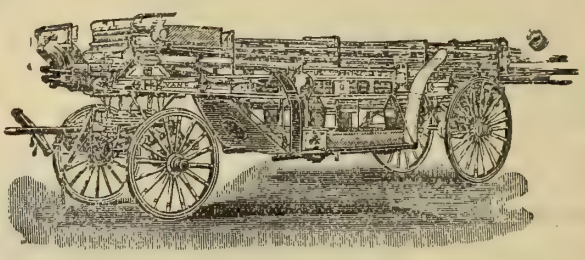

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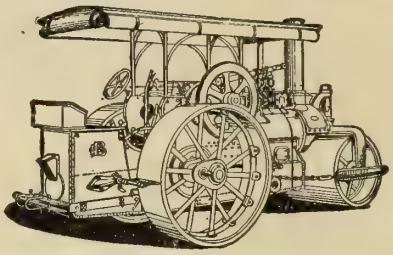

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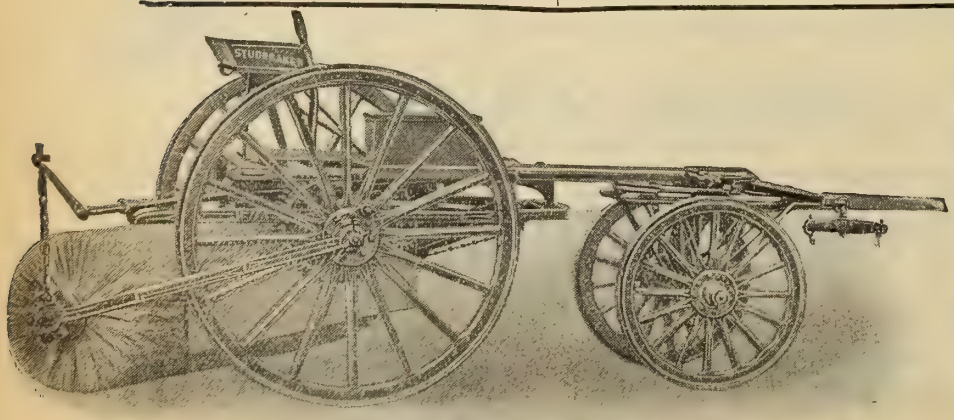

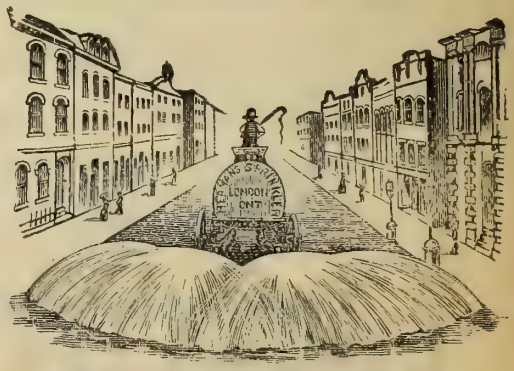

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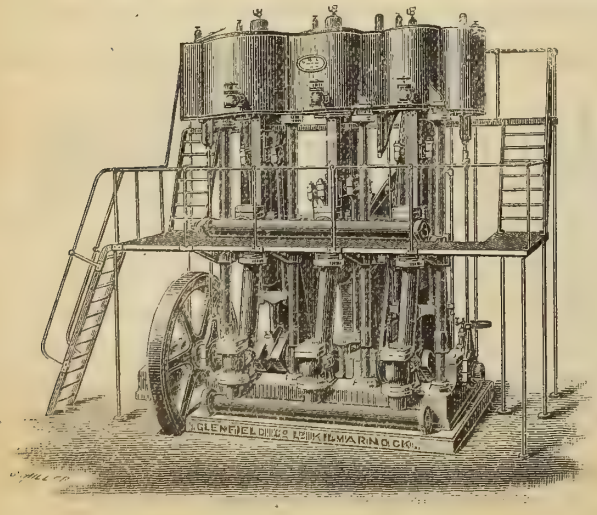
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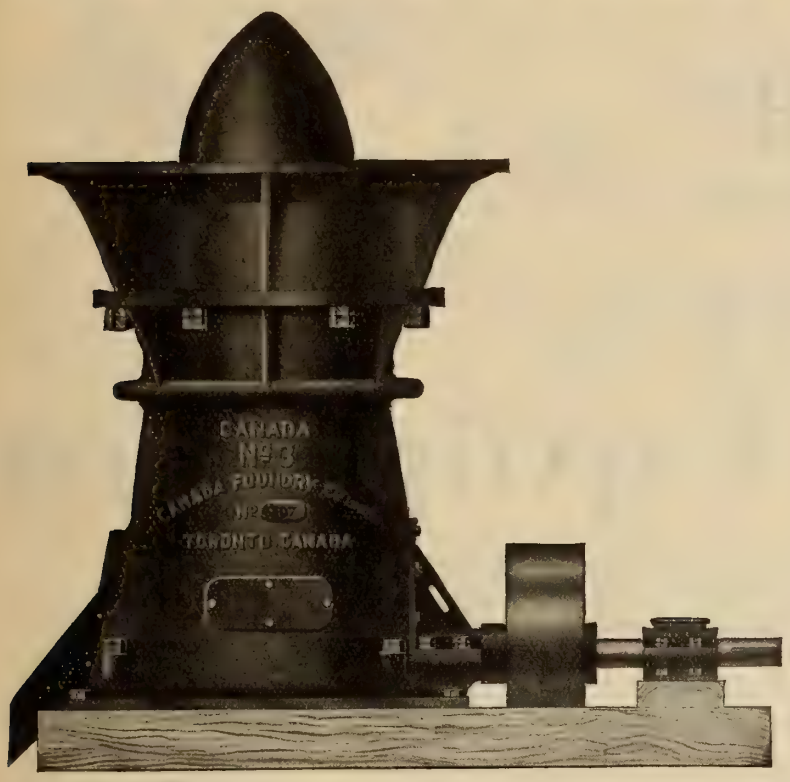

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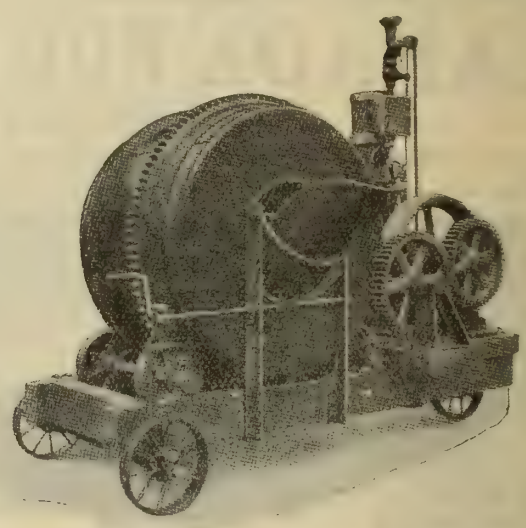

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A Weekly Journal of Public Works, Tenders, Advance Information and Municipal Progress

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VOL. 16. TORONTO, MONTREAL — FEBRUARY 7, 1906 — WINNIPEG, VANCOUVER No. 49

THE CANADIAN CONTRACT RECORD
PUBLISHED EVERY WEDNESDAY
As an Intermediate Edition of the Canadian Architect and Builder.

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WANTED

Competent Architectural Draftsman capable of taking charge of office in a western city, must be good on design and details. State experience and salary expected. Address Box 77 CONTRACT RECORD, Toronto.

CITY OF REGINA

Tenders for New City Hall

The Corporation of the City of Regina will receive sealed tenders, marked "Tender for New City Hall", up till noon of FRIDAY, 16TH FEBRUARY, 1906, for the construction of a new City Hall in the City of Regina, Sask., according to plans and specifications prepared by Messrs Dodd & Hopkins, Architects, Calgary, which may be seen at their offices at Regina, Sask., and Calgary and Edmonton, Alta., as well as at the Builders' Exchange in Winnipeg, Toronto and Montreal

Each tender to be accompanied by a certified cheque drawn upon any chartered bank of Canada payable to the order of the City of Regina to the extent of 5 per cent. of the total amount of such tender, which will be forfeited should the Contractor fail to enter into a satisfactory contract when notified to do so

The Contractor whose tender is accepted will be required to furnish a bond for $30,000.00 or three sureties for $10,000.00 each satisfactory to the City Council.

The City Council reserve the right to reject any or all tenders.

J. KELSO HUNTER,
Secretary-Treasurer.

Regina, Sask., 24th January, 1906.

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W. W. LA CHANCE, Architect,
P O. Box 613, Regina, Sask.

Tenders Wanted

Tenders addressed to the Mayor and Council of the Town of Chatham, N B., will be received up to Noon on WEDNESDAY, THE 28TH DAY OF FEBRUARY, 1906, for the necessary Steam and Electrical Apparatus for a new Light and Power Station in the Town of Chatham, N.B.

Plans and Specifications can be seen and copies obtained at the office of the Town Clerk or at the office of Lea & Coffin, Coristine Building, Montreal.

The lowest or any tender not necessarily accepted.

JAMES NICOL, Mayor. P. J. MACINTYRE, Town Clerk.

TENDERS FOR PORTLAND CEMENT

Sealed tenders addressed "S. R Armstrong, City Clerk Peterborough, Ont.," and endorsed "Tenders for Cement", will be received up to FEBRUARY 20TH, 1906, for supplying 4,000 barrels more or less of Portland Cement. Tenderers will state whether cement is packed in sacks or barrels, net weight per sack or barrel, and price f.o b. Peterborough. Sample tests will be made from consignments before acceptance. Delivery to commence not later than May 2nd, 1906. A marked cheque for an amount equal to 5 per cent of total contract must accompany each tender. Specifications furnished on application. The lowest or any tender not necessarily accepted.

S. R. ARMSTRONG,
City Clerk.

TENDERS FOR ELECTRIC GENERATORS

Sealed tenders addressed to Alderman J. C. Gibson, Chairman Fire, Water and Light Committee, for supply of two 500 H. P. Electric Generators, will be received at the office of the undersigned up to 3.30 p. m. on MONDAY, FEBRUARY 26TH, 1906

Specifications and forms of tenders may be obtained on application to H. N. Ruttan, City Engineer, Winnipeg, Canada.

Each tender must be a companied by an accepted cheque or draft payable to the order of the City Treasurer, or cash deposit for the sum called for in the form of tender supplied, which will be subject to forfeiture in case of failure on the part of the contractor to enter into a written contract, with approved sureties, if called upon to do so.

The city reserves the right to reject any or all tenders or to accept any bid which appears advantageous to the City of Winnipeg.

C. J. BROWN,
City Clerk.

City Clerk's Office,
Winnipeg, Jan. 10, 1906.

WANTED

at once, a first-class Draughtsman. E. L. HORWOOD, Bank Street Chambers, Ottawa, Ont.

Sealed Tenders

Sealed bids will be received up to noon on SATURDAY, FEBRUARY 17TH, 1906, for all trades required in the erection of a Bank and Residence Building, corner Centre Avenue and Edward Street, Toronto.

Plans and specifications may be seen at the office of the Architect, to whom all tenders are to be addressed.

F. S. BAKER, Architect,
Mail Building, Toronto.

Sealed Tenders

Sealed bids will be received up to noon on FEBRUARY 14TH for all trades required in the erection of a Residence in Roxborough Street East.

Plans and specifications may be seen at the office of the Architect, to whom tenders are to be addressed.

F. S. BAKER, Architect,
Mail Building, Toronto.

CANADIAN PACIFIC RAILWAY

Tenders covering the work required in connection with Track-Laying, Bridging and Ballasting on the Sudbury branch between Romford and French River Crossing (40 miles) will be received by the undersigned up to noon on SATURDAY, MARCH 10TH, 1906.

Plans and specifications can be seen at the office of the Division Engineer of Construction, 112-118 King Street West, Toronto.

J. W. LEONARD,
Manager of Construction.

CONTRACTS OPEN.

CHATHAM, N.B.—John McDonald intends building a residence on King street this summer.

KINGSTON, ONT.—Plans are being prepared for improvements to the Iroquois hotel for C. Millan.

CALGARY, ALTA. — The Linihan Lesson Company are desirious of building a street railway here.

MACLEOD, ALTA. — An electric light plant may be installed in connection with the water works.

PARIS, ONT.—The overhead bridge to be built by the Grand Trunk Railway will be commenced this spring.

LACOMBE, ALTA.—The Blindman Power Company are likely to be granted a franchise for electric lighting.

ALMONTE, ONT.—The question of constructing a subway under the C. P. R. tracks is again being discussed.

DUNNVILLE, ONT.—Council have given two readings to a by-law to raise $20,000 for piping the town for gas.

NEWMARKET, ONT. — Tenders will be received by the Town Clerk up to February 22nd for furnishing concrete tile.

CALGARY, ALTA. — The School Board have reported in favor of building a new Normal school on Block 103, Section 16.

MAGRATH, ALTA.—The Raymond Mill & Elevator Company have decided to build a mill at this place, to cost about $25,000.

NORTH TORONTO, ONT.—The Council have decided to purchase another boiler and pump for the waterworks station.

NEW WESTMINSTER, B.C.—The Board of School Trustees have decided to take immediate steps to enlarge the Central school.

MARMORA, ONT. — R. Snell, Village Clerk, desires bids by Monday, 12th inst., for purchase of $5,500 4½ per cent. debentures.

THESSALON, ONT.—The Council are looking into the question of developing a water power on the Thessalon river for electric light.

NORTH BAY, ONT. — A public meeting has been called to consider the question of forming a company to build a curling and skating rink.

EDMONTON, ALTA.—R.S. Kelsch, Montreal, has been engaged to advise the Town Council regarding the installation of a telephone system.

INDIAN HEAD, SASK.—The Town Council have applied to the Legislature for permission to issue $160,000 of bonds for waterworks and electric light purposes.

ST. BONIFACE, MAN.—It is proposed to secure new plans for fire station on corner of Goulet street and Tache avenue so as to bring the cost within $8,000.

SHERBROOKE, QUE.—The Catholic School Commissioners have decided to build an addition to the Sacred Heart Academy, to be three storeys, 68 × 36 feet, of brick.

ISLINGTON, ONT.—The T. Eaton Company, Toronto, have purchased 1,000 acres of land at this place for the purpose of establishing a nursery. Large conservatories will be erected.

WELLAND, ONT. — The Welland County Telephone Company has been incorporated to build a telephone line in this county. John Pierson and S. H. Tripp, of Bertie Township, are directors.

KELLY'S COVE, N.S.—Tenders are invited by the Department of Public Works, Ottawa, up to Saturday, 24th inst., for construction of a post-office here. Plans on application to the Postmaster.

DINORWIC, ONT.—The Gold Rock Telephone Company has been organized by Archie Campbell and will operate between Gold Rock, Wabigoon, Dinorwic, Dryden and the Grand Trunk Pacific main line.

WATERLOO, ONT. — The Grand Trunk Railway will replace the bridge over the creek near the Mueller cooperage factory with an iron structure. Plans have been completed for the new G. T. R. station here.

MIDLAND, ONT.—The Grand Trunk Railway have filed plans with the Railway Department at Ottawa of proposed improvements here, which will include the building of several wharves and other terminal facilities.

MONTMAGNY, QUE.—F. Gelinas, Secretary Department of Public Works, Ottawa, is asking for tenders up to 12th inst. for erection of a post office here. Plans on application to H. de Lotinville and at the above Department.

VICTORIA HARBOR, ONT.—The Canadian Pacific Railway will build terminals here. In connection with their proposed line from this place to Peterboro, three overhead bridges will be constructed crossing the Grand Trunk Railway.

ARMSTRONG, B. C. — The Armstrong Light & Power Company have been given a franchise, and will commence work immediately. It is proposed to utilize the power at Davis Creek for the generation of electric energy.

PARRSBORO, N.S. — Tenders are invited by the Department of Public Works, Ottawa, up to Friday, March 2nd, for the construction of six lighters and an excavating channel at this place. Cheque for $3,000 to accompany each tender.

AMHERST, N.S.—It is proposed to enlarge Christ's church.—Ferguson & Thornton have purchased the Treen block, and intend enlarging the building next summer.—The Nova Scotia Telephone Company have bought the property at corner of Victor and Laplace streets and will likely erect a stone building.

PEMBROKE, ONT.—J. L. Morris, C. E., is engineer for the construction of the waterworks intake pipe, although N. J. Kerr, of Ottawa, was asked by the Mayor to report on the plans. Mr. Morris is also chief engineer in charge of the Black River power development for the Pembroke Electric Light Co.

WINNIPEG, MAN. — C. J. Brown, City Clerk, will receive tenders up to Tuesday, February 27th, for supply of a quantity of sewer pipe and junctions. — The Northwest Travellers' Association are open to buy a site on which to erect a building suitable for their purposes. — Sites for a new police station are under consideration.

FREDERICTON, N.B.—Dr. W. C. Crockett has purchased a lot near corner of George and Church streets on which he intends building a handsome residence.—The directors of the New Brunswick Telephone Company have decided to construct a copper circuit between Fredericton and St. John, and between Canterbury and St. Stephen.

PORTAGE LA PRAIRIE, MAN.—Harry Stephens is about to erect six brick residences and remodel the old Georgian house on Main street, the plans for which are being prepared by John Bronger, architect.—F. A. Whitaker, Town Clerk, desires tenders by 9th inst. for supply of 2,500 to 3,000 barrels of Portland cement for granolithic walks.

CORNWALL, ONT.—A committee, to act in conjunction with Mr. Magwood, C.E., has been appointed by the County Council to report on the construction of new bridges over the Castor river on boundary between Mountain and Osgoode, over the Payne river on boundary between Finch and Roxborough townships, over river Aux Raisin at Grants' Corners, and to replace the Winchester Springs bridge. Tenders will be invited and submitted at the June session.

ST. THOMAS, ONT.—The Council will ask for legislation to issue $30,000 of debentures for gas works extensions and other purposes.—The details of the construction of proposed subway under the Michigan Central Railway tracks at Ross street have been settled. The Michigan Central will erect the retaining walls and abutments and street and bridge work, while tenders for excavating, paving, etc., will be asked for by the city, the whole to be constructed under the supervision of the City Engineer. The subway will be 36 feet wide.

LONDON, ONT. — The County Council have decided to put a slate roof on the jail, at a cost of about $1,400.—The question of hotel accommodation is being considered by the City Council, and it is probable that some steps will be taken in the near future.—It is stated that the new Grand Trunk depot will be of red pressed brick, with freestone trimmings and rock-faced stone foundation. The freight sheds will be of brick.—The Board of Works have decided to construct a vitrified brick pavement on York street, from Talbot street west to the bridge.

HAMILTON, ONT.—Tenders will be invited at once for installing the Webster heating system in the City Hospital.—The Hamilton Terminal Company have asked for certain privileges from the city, the object of the promoters being to build a large Union depot at the corner of King and Catharine streets for use of all electric railways. The proposed improvements are estimated to cost $250,000.—Thomas Hanrahan is planning to replace his hotel on corner of Barton and Catharine streets with a new building. Samuel Wilson also intends erecting a new structure to replace the Vineyard Hotel, Main street east.

BRANTFORD, ONT. — The Brantford Electric & Operating Company have sold their interests to the Western Counties Power Company, of which A. T. Duncan is managing director. It is the intention to make extensive improvements to the plant of the former company.—Westbrook & Hacker purpose enlarging their brewery in West Brantford. —Plans are being worked out for the erection of a labor temple in this city.—The Felt Roofing Company have decided to locate their factory on the property lying south of the Grand Trunk tracks between Niagara and Sydenham streets.

STRATFORD, ONT.—Tenders are being taken on additions to the Grand Trunk shops in this city, the new buildings to consist of a boiler shop 225x120 feet and a plate shop 125x50 feet; estimated cost, $100,000.—Plans have been prepared for an up-to-date creamery building to be built by McCully & Dempsey, to be 40 x 60 feet, two stories and basement. Building operations will be commenced immediately.—J. S. Russell, architect, is preparing plans for a two storey brick store for J. B. Badour, a similar store for William Casson, and a residence on Nile street for Mrs. McEwen.

PETERBORO, ONT. — Bond & Smith, architects, Toronto, are preparing plans for extensive improvements to be made at once to the Oriental Hotel, conducted by George N. Graham. Twenty-five bedrooms will be added and the present structure remodelled. — The authorities of St. Peter's cathedral are considering the providing of increased accommodation. — The proposed House of Refuge for the county will likely be located at either Lakefield or Norwood. —The Peterboro Curling Rink Company have decided to make alterations to the property and will next summer erect a new front to the building.

QUEBEC, QUE. — The Catholic Board of School Commissioners have purchased the Blouin property for the purpose of enlarging the school on Hermine street. — The Wolfe, Megantic & Lotbiniere Railway Company have acquired the right of way for a railway from Lime Ridge to this city, and G. W. Lambly, of Inverness, has been instructed to close an agreement with the G. W. Orcutt Company, of Boston, for the construction of the road.—The improvements to be made here by the C.P.R. will entail a large expenditure. Crib work will be constructed from Prince Edward street to connect direct with the north wall of the Louise docks. Two freight sheds will be erected, one 40 x 90 feet and the other 60 x 90 feet, also a new station. —It is expected that the new post office for St. Roch will be located on the corner of Joseph and Dorchester streets.

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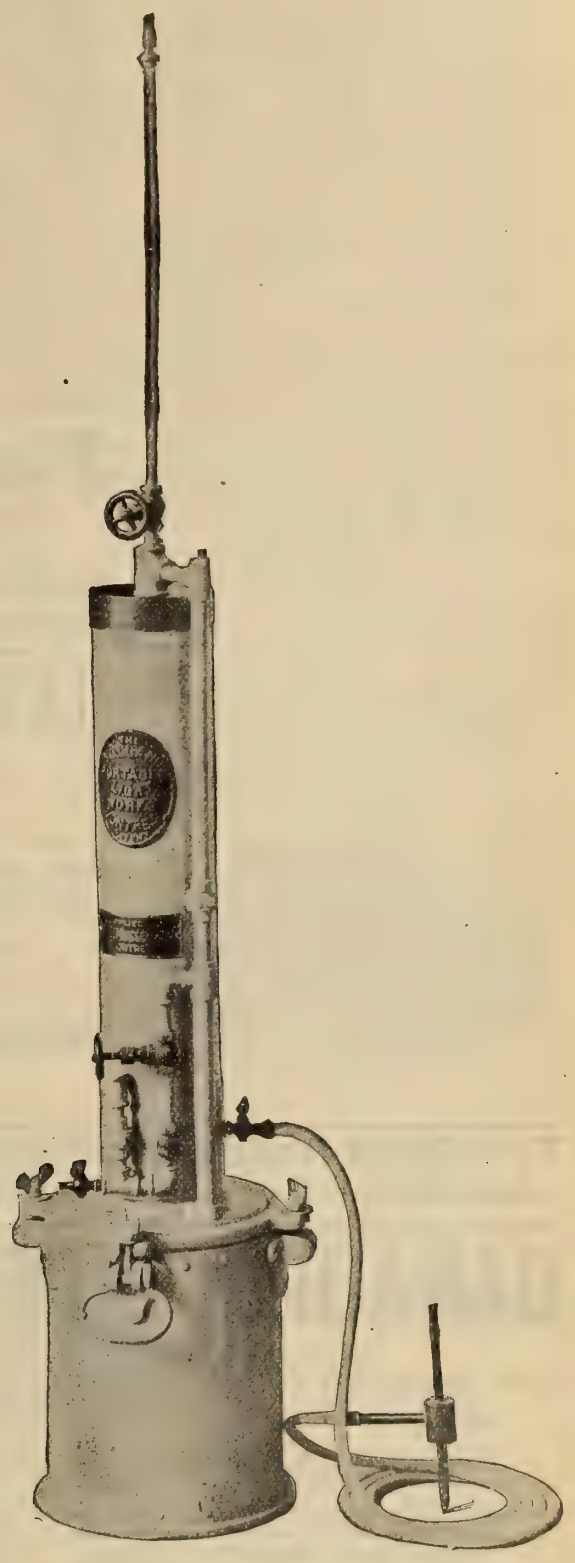

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OTTAWA, ONT.—It has been decided to modify the plans for the new Fat Stock Show building so as to keep the cost within the $40,000 estimate, and new tenders will be invited very shortly. —The building committe of the School Board have requested that $105,000 be provided for additions and alterations to the Creighton, Elgin and Osgoode schools.—St. Andrews' Society have instructed the building committee to procure plans for a new building to cost about $20,000.—The estimates of the Fire and Light Committee include an appropriation for the purchase of a new hook and ladder truck. — James Davidson, Chairman of the Board of Works, has recommended that the City Engineer be instructed to prepare plans for constructing a tunnel on Laurier avenue west, from Percy street to a point near Victoria, also that steps be taken towards the building of the Bank street subway and the construction of sewers on Cartier, Cumberland and other streets. — Contracts will be let at an early date for annual supplies, including cement, stone, sewer pipe, hydrants, valves, castings, etc.

VANCOUVER, B.C. — Plans have been completed for the new building to be erected on west side of Seymour street, between Dunsmuir and Pender street, for the British Columbia Telephone Company, and tenders will shortly be called for by the architects, Dalton & Eveleigh. The building will be of iron, steel and concrete.—Plans prepared by F. W. Macey have been adopted for a residence for the superintendent at the cemetery; estimated cost, $2,500.—The Board of School Trustees have recommended that the building committee take steps towards the erection of a new school at Cedar Cove.—The Provincial Government have decided to build a new court house on the block just west of the Vancouver hotel. It is understood that competitive plans will be invited, and that the successful architect will be paid $1,000.—The City Engineer has been instructed to prepare plans for a new market building.—Dalton & Eveleigh, architects, are preparing plans for a new building to be built on south side of Hastings street, between Cambie and Abbott streets, for E. E. Hewson, of Amherst, N.S.

MONTREAL, QUE.—Plans of steam and electrical apparatus for a new power station at Chatham, N. B., may be seen at the office of Lea & Coffin, Coristine Building, this city. Tenders close February 28th.—The Provincial Light, Heat & Power Company will construct a new power house to develop their water power on the Soulanges Canal near Cedar Rapids. Plans for the electrical equipment are being prepared by R.S. Kelsch, E. E., of this city.—The Natural History Society are considering a proposition to erect a hall with a seating capacity of 3,000.—The C.P.R. is understood to be making surveys in the east end with a view to erecting a large storehouse for the convenience of wholesale merchants. —It is reported that the C.P.R. have decided to electrify their line between Montreal and Quebec. — Building permits have been granted as follows: R. E. T. Pringle Co, brick factory building, Albert, Rose, Delima and Delisle streets, St. Henri, cost $30,000; Robert Bow, Amherst street, four dwellings, brick, cost $5,000; G. H. Kennedy, Amherst street, four dwellings, brick, cost $5,000; Prudeau Delphine, St. Lawrence street, brick and stone dwellings, cost $7,000; McCready Estate, Dowd street, stone dwelling, cost $17,000.

TORONTO, ONT. — The Grand Trunk Railway Company will build a

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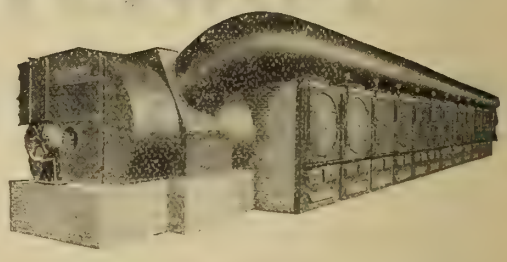

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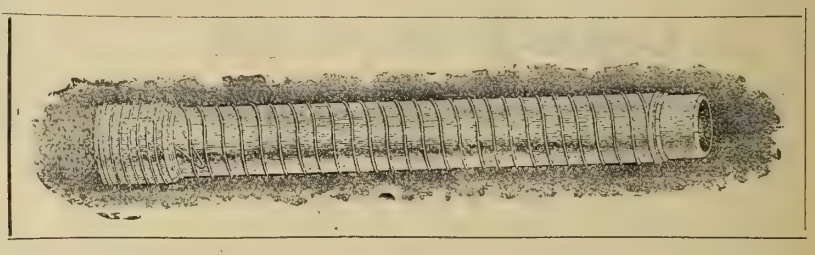

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new bonded warehouse on part of the property expropriated for the new Union station.—The Imperial Bank is reported to have purchased the south-east corner of Queen street and Broadview avenue with the intention of erecting a branch bank on the site.—Eighteen designs have been submitted by architects in the competition for plans for the Carnegie library building to be built on the corner of St. George and College streets.—The Pease Foundry Company have had plans prepared for an office and factory building, of pressed brick and stone, to be built at 36 and 38 Queen street east. Symons & Rae are the architects. It is understood that the Gale Manufacturing Company, of Montreal, have acquired the former building of the Pease Company and will utilize same for the manufacture of bedsteads.—The first residence in connection with the University of Toronto will likely be commenced this summer, and will be located on Hoskin avenue. It is proposed to erect several three storey houses, each to accommodate from forty to fifty men.—The Provincial Board of Health will, at an early meeting, consider four different schemes which have been submitted by Dr. Sheard and City Engineer Rust for sewage disposal for this city.—Chief Grassett, of the Police Department, has recommended the installation of a new police signal station, at a cost of $20,000, and repairs to stations 3,4,5 and 6.—D. E. Hughes, 292 Wellington street west, desires tenders by Saturday, 10th inst., for slate and sheet metal work, plumbing, painting, plastering and electric wiring in connection with the building of Chalmers Sunday school.—The City Engineer has recommended the construction of the following pavements: Bloor street, from Lansdowne avenue to Dundas street, cost $11,359; Deleware avenue, Shanley to Van Horne, cost $13,105; Argyle street, Dundas to Dovercourt, brick, $6,066; Brant street, brick, $7 133; Denison avenue, macadam, $6 623; Morrison street, brick, cost $1,523; Wellesley street, macadam, Sumach street east, $1,002.—F. S. Baker, architect, is asking for tenders up to 14th inst. for erection of a residence on Roxborough street east, and up to the 17th inst. for a bank and residence building, corner Centre ave. and Edward street.—Building permits have been granted as follows: Mrs. A. Crawford, 2-storey brick hotel, 372 Front street west, cost $6,000; E.

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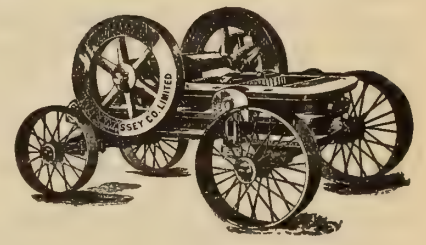

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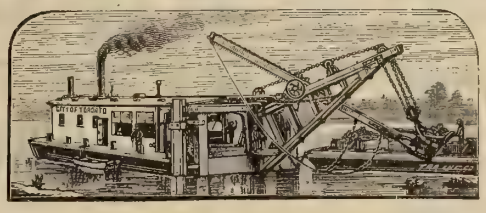

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Havelock Walsh, 2½-storey brick dwelling, Roxborough street east, cost $4,500; A. E. Fielding, 2½-storey stone and brick dwelling, east side Grace street, near College, cost $3,000; Chas. Bulley, two 2-storey and attic brick dwellings, Withrow avenue, cost $5,000, C. J. Gibson, 2½-storey brick dwelling, Lansdowne Place, N. Rosendale, cost $6,000; C. W. Chadwick, pair 2½-storey roughtcast dwellings, brick fronts and foundations, w. s. Bellwoods avenue, near Queen street, cost $3,600; M. S. Sine, 2-storey brick dining-room, 176 King street west, cost $3,500; A. T. Parker, 4 attached 2-storey and attic frame dwellings, Sackville street, near Wilton ave., cost $6,000; Alex Orr, 2-storey and attic brick dwelling, 560 Dovercourt road, cost $4,000; H. P. Redway, 2-storey and attic brick dwelling, cor. Withrow and Broadview ave., cost $4,000; John Kee, two 2-storey stone dwellings, Birtle ave., cost $5,000; Fairgreive Co., Ltd., 2-storey wood and iron warehouse, 117 Brock avenue, cost $5,500.

CONTRACTS AWARDED.

HALBRIGHT, K.—J. W. Ney, Regina, has purc $3,000 village debentures.

EGANVILLE, ONT. — Addition to separate school; Bruno Michel, of Pembroke, sub-contractor for masonry.

WOODSTOCK, ONT.—Purchase of $57,000 city debentures: H. O'Hara & Company, Toronto, purchasers, $56,985.16.

RED DEER, ALTA.—Town debentures to the amount of $15,300 have been sold to G. A. Stimson & Company, Toronto.

HILLSBURG, ONT.—The contract for heating the public school here has been let to the James Smart Manufacturing Company, Brockville, Ont.

ST. THOMAS, ONT. — Robert J. Connolly and Charles Murphy have been awarded the contract to erect 70,000 feet of trestle work for the Southwestern Traction Company.

TORONTO, ONT.—Symons & Rae, architects, have let the contract for the carpenter work of the Goel Tzedec synagogue on University avenue to Henry F. Wilmott, of Kingston.

BRANTFORD, ONT.—The contract for Crown Bank building has been let to Schultz Bros. Curry, Sproatt & Rolph, Toronto, are the architects. Building will be two stories, of red pressed brick, stone basement, hot water heating.

PEMBROKE, ONT.—The following tenders were received for the construction of the Clay Bank bridge:

	Low level.	High level.
Substructure:		
Bourke & Wilson	$14,308	$16,490
Moran & Lynn	11,730	13,497
For the superstructure:		
Dominion Bridge Co.	10,470	14,225
Dickson Bros.	13,453	16,737
Locomotive & Mach. Co.	17,370	16,640

The tender of Dickson Bros., of Campbellford, has been accepted for complete bridge at $22.022.

HULL, QUE.—The Fathers of the Holy Ghost have let the contract for erection of one of the buildings in connection with the proposed Agricultural college to V. Ladouceur, of Sturgeon Falls, Ont., at $46,000. Building will be four stories, 124 x 45 feet, with addition 66 x 36 feet, of stone and pressed brick. C. Brodeur, of this place, architect.

LONDON, ONT. — Alterations to building, corner Richmond and King streets, for Imperial Bank: Carpenter work, R. G. Wilson; brick and stone work, George Hammettt. N.R. Darrach, St. Thomas, architect.—The Board of Works last week awarded the following contracts: Concrete walks, Section 1, Forest City Paving Company, north of Dundas and east of Wellington, 8¾ cents a square foot; section 2, George Norton, south of Dundas and east of Wellington, 8¾ cents; section 3, W. J. Anthistle, north of Dundas and west of Wellington, 9 cents; section 4, Silica-Barytic Company, south of Dundas and west of Wellington, 9 cents; lumber, Dyment-Baker Company, at $24.47 per 1,000 feet; iron castings, James Cowan & Co., at $2.25 per cwt.; cement curbs and gutters, Forest City Paving Co.; corner irons, Wm. Malloch & Co., at $3 per cwt.; cement, E. Skuse, $2.20 per barrel; sewer pipe, E. Skuse; concrete pipe, Wm. Anthistle.

WINNIPEG, MAN.—The following tenders were received by the City Council for pumping machinery for well No. 3: Camden Iron Works, $10,500 including freight, duty and erection (accepted); John McDougall Caledonian Iron Works, Montreal, first proposition $10,708, second proposition $11,219; Mathers & Pat, Manchester, $11,110 including duty and freight, but not erection; Allis-Chalmers-Bullock, Montreal, $10,600 including delivery and erection; Canadian Westinghouse Company, first proposition $11,100, second proposition $11,500.—The Dominion Bridge Company, Montreal, have been awarded, through their western representative, E. E. Sheppard, the contract for the structural steel and cast iron work of the St. Boniface cathedral, (the price being in the neighbor-

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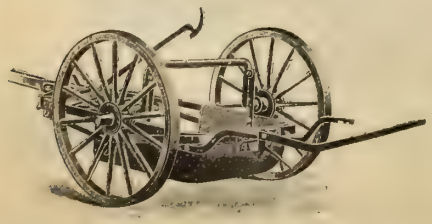

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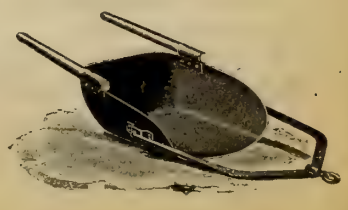


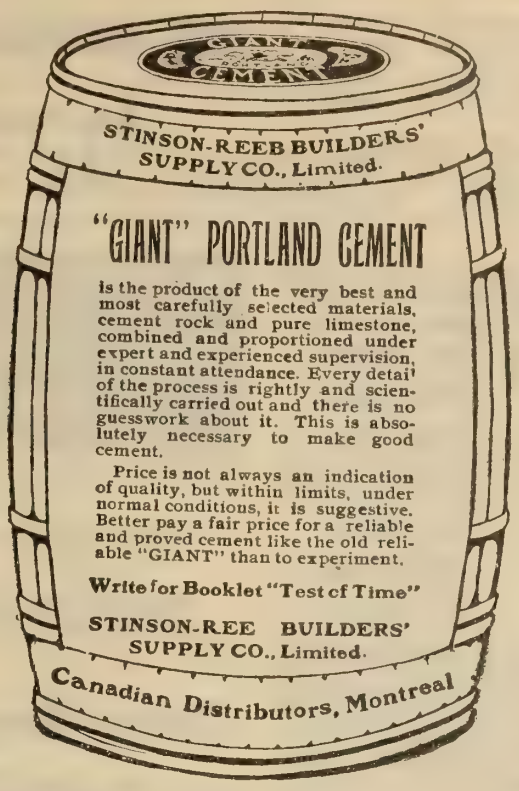
hood of $16,000. This company are also supplying the structural steel for the C.P.R. shops, hotel, and terminal depot. —The contract for supplying the ties, telegraph posts and fence posts for the Midland Railway from the international boundary to Portage la Prairie has been awarded to John Hyland & Company, this city. It is reported that the grading contract has been let to James Cowan.

BIDS.

OTTAWA, ONT. — Three tenders were received for a system of garbage disposal for the city, as follows: J. W. Joyce, $21,000 a year; C. A. Parker, $18,000; James Kennedy, $17,5000. The City Engineer will report.

WOOD PAVING IN ENGLAND.

It is curious that in the process of history repeating itself there should now be exhibition an almost world-wide tendency in municipalities to return to the wood-block pavment, says an exchange. In London and in nearly all of the large towns and cities of the British provinces there has been an enormous increase in the selection of wood paving in preference to all other kinds. This is the more significant for the reason that the wood must be brought from a far-away conntry, much of it from Australia.



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							Neat.					3 (Sand) to 1 (Cement)				
					Initial	Final	1 dy.	7 dys.	28 dys	3 mos	1 yr	1 dy.	7 dys.	28 dys.	3 mos.	1 yr.
1903	20	O.K.	3.135	2.1	162	345	307	701	783	827	*	74	214	299	367	*
1904	44	O.K.	3.150	2.0	132	342	300	744	848	914	938	86	62	354	401	427

* Tests for 1 year were not completed when records closed. 1905 report not yet issued.

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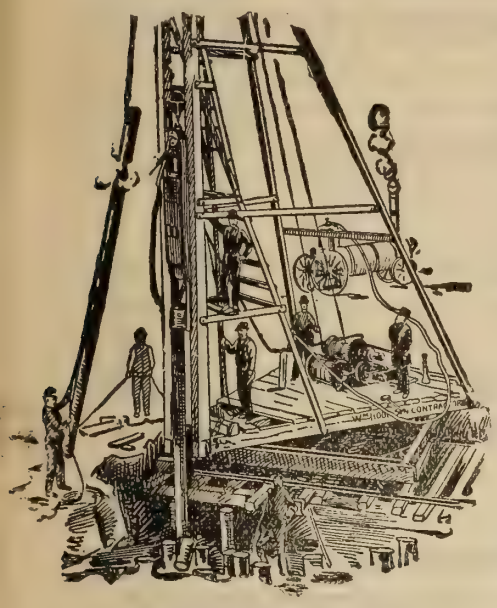

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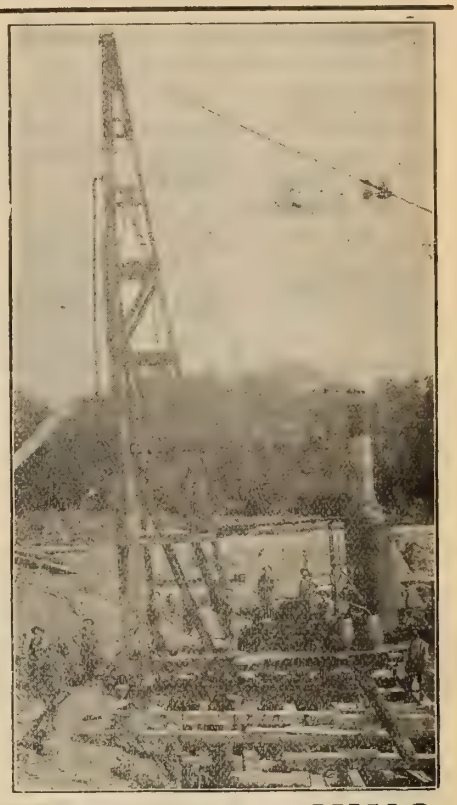

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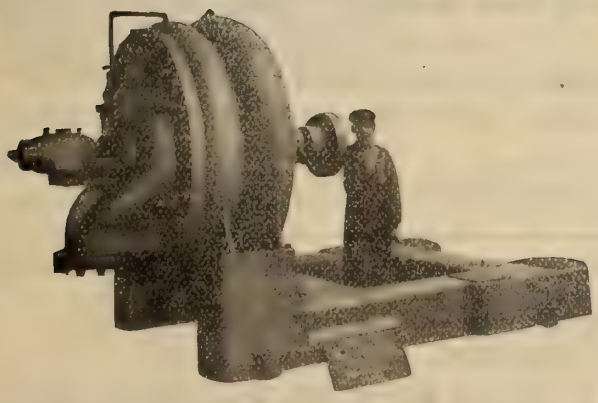

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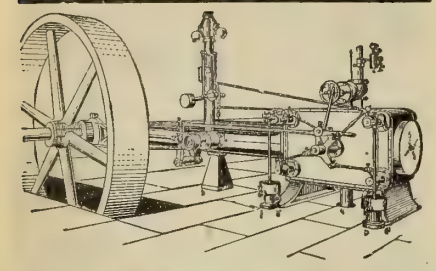

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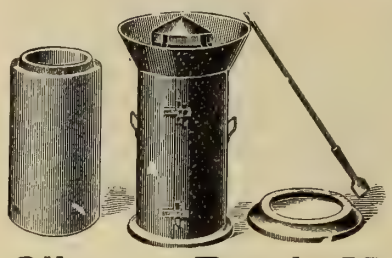

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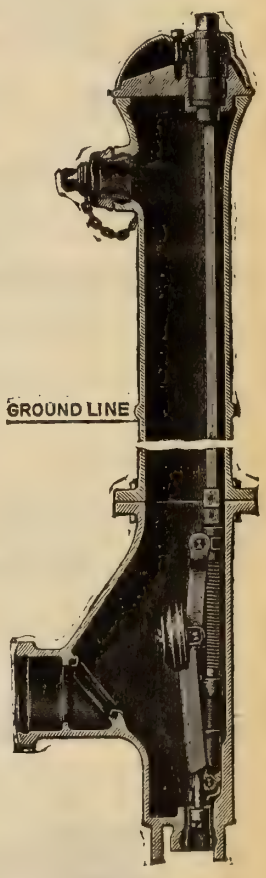

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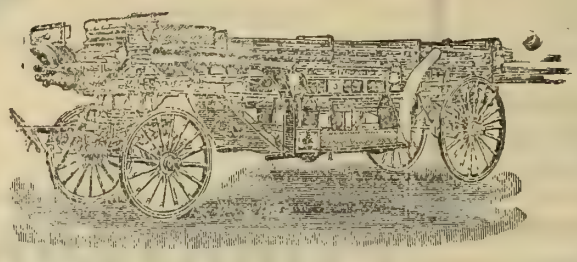

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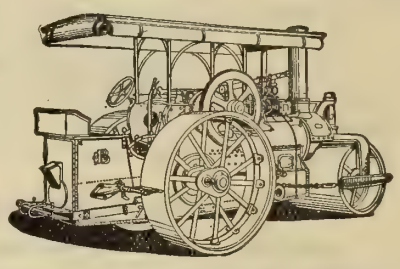

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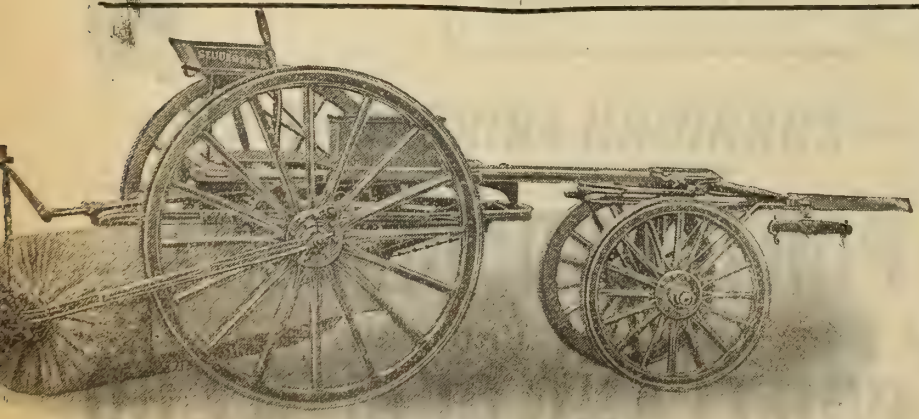

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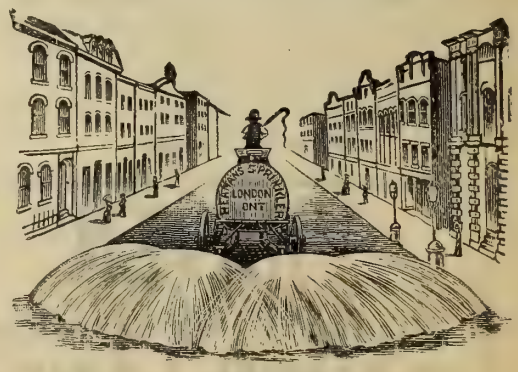

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Our Waggoner extension and other fire ladders are reinforced with steel wire trussing making them at once the **Strongest** and the **Lightest**, as they are the **Cheapest** Firemen's ladders in the market. They are also the **Quickest** operated, a matter of vital moment in firefighting.

Our safety lock is the **Safest** and simplest produced. **Clerks, Councils** and **Fire-Chiefs**, write for circular, &c.

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Contractors instead of asking friends to go on their bonds should have a company act as surety for them.

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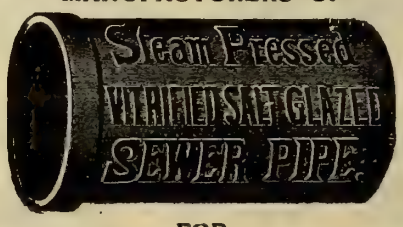

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Sluice Valves, Air Valves, Relief Valves, Hydrants, Stand-Posts
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ASHLEY'S PATENT DEEP-WELL PUMPS
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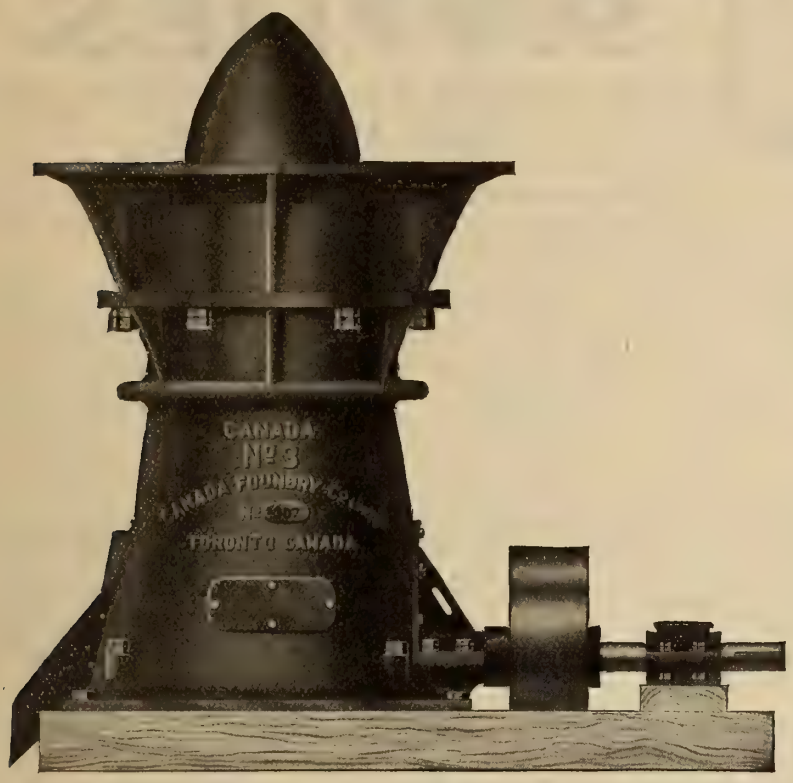

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3 inches to 60 inches diameter.

For Water, Gas, Culvert and Sewer

HAMILTON, ONT.

FOR SALE

Contractors' SUPPLIES.

Some Almost New; Some Overhauled; Some as Received.

We are often requested by Contractors, who have finished their contracts, to sell their plants, and we are giving below a partial list of material we have on hand for immediate disposal—subject to inspection and prior sale.

1 40 h. p. Locomotive Boiler.
1 Orange Peel Bucket, 1½ yd. capacity.
3 Clam Shell Buckets, 3 yd. capacity.
1 Upright Boiler, 45 h.p.
1 Upright Boiler, 30 h.p.
1 Concrete Bucket, 1 yd. capacity.
1 Upright Submerged Tube Boiler, 100 h.p.
1 Upright Boiler, 60 h.p.
36 Dump Cars, 30″ gauge.
1 Hand Car, 30″ gauge.
1 Clam Shell Bucket, 1¼ yd. capacity.
16 Western Pattern Double Dump Cars, 3 yd. capacity.
13 One Way Dump Cars, 2½ yd. capacity.
2 Laidlaw Dunn Gordon Duplex Air Compressors, Class F. C.
1 Deane Single Jet Condensor.
1 Sullivan Class Y Rigid Head Channeler.
30 Cast Iron Wheels and Axles for Dump Cars—wheels 24″ diameter.
2 Sargeant Drills, 3¼″ complete.
5 Sargeant Drills, 3½″ complete.
1 Diving Outfit, complete.
3 Guy Derricks, 5 ton capacity.
1 Rand Drill, 3¼″.
1 Electric Dynamo, 2½ k.w. 110 volts.
1 Snyder Horizontal Engine, 12″ cylinder, 15″ stroke.
4 Hoisting Engines, 8¼ x 10, double cylinder, single drum.
2 Beatty Hoisting Engines, 6″ x 12″, double cylinder, double drum, with boilers and swingers.
8 Beatty Hoisting Engines, double cylinders, 6½ x 8″, double drums without boilers.
2 Beatty Hoisting Engines, 8 x 12, double cylinder, double drum.
1 Beatty Double Drum H.P.
1 Marsh & Henthorne Hoisting Engine, complete with swinging gear cylinders 6 x 10.
1 Jenckes Hoisting Engine, complete with swinging gear cylinders 6 x 10.
1 Beatty Hoisting Engine with four drums, cylinders 7 x 10.
5 Double Drum Horse Powers.
2 Norton ball bearing Screw Jacks, 70 ton capacity.
1 Baldwin Locomotive, cylinders 11 x 16″.
1 Dubbs Locomotive, 16 x 26 cylinder.
1 Porter Locomotive, 9 x 14 cylinders.
1 No. 3 Smith Mixer, with engine only, on skids.
1 Drake Mixer, without engine.
1 Steam Pile Driver, No. 3 Warrington complete.
1 8″ Morris Centrifugal pump with direct connected engine.
3 Beatty Centrifugal pumps, 6, 8 and 10″.
1 Northey Force Pump.
1 Centrifugal Pump 8″.
2 New York Pulsometer Pumps, 4″ and 2″.
1 Fan Pump 10″ inlet, 8″ discharge.
1 No. 7 Pulsometer Pump.
1 Hoyt Bros. No. 2 Planing Machine complete.
35 Tons No. 25 relaying rails with plates.
1½ tons of No. 16 relaying rails with plates.
1 Snow Plow.
1 Dredge Hull of oak, 80 ft. x 26 ft.
1 Marion Steam Shovel, Model A.
2 Dominion Scows.
2 Scows, 80 x 20′.
1 Complete Circular Saw Mill with carriage 40′ long.
1 Cast Iron Swing Saw.
1 Marion Steam Shovel, style A, 1¾ yd. capacity dipper.
1 Model G Marion Steam Shovel, 2 yd. capacity dipper.
1 Marion Steam Shovel, Model A, 1½ yd. capacity dipper.
1 Tug.
16 No. 3 K. & J.P.B. Wheel Scrapers.
1 Vulcan Steam Shovel, 1¼ yd. capacity dipper.
50 tons No. 45 relaying rails with plates.
1 New Era Grader.
20 Austen Dump Wagons to go with grader.
20 Dump Cars, K. & J. Class E, 3 yd. capacity.
2 Steam Pumps.
1 Beatty Hoisting Engine, 7 x 10″ double cylinders, double drum.
1 Marion Steam Shovel, model 20, 1¼ yd. cap. dipper.
35 K. & J. Drag Scrapers.
10 No. 2 K. & J. P. B. Wheel Scrapers.
2 Dump Carts.
2 Setts Cart Harness.
6 Rooter Plows.
3 Contractors' Small Plows.
1 No. 1 Ransome Concrete Mixer with engine and boiler on trucks.
1 No. 1 Ransome Concrete Mixer with engine only.
9 No. 2 K. & J.P.B. Wheel Scrapers.
2 No. 1 Boss Scrapers, W.O.R.
1 Duplex Steam Pump.
1 Vertical Steam Boiler, 15 h. p.
1 Vertical Centrifugal Pump, 6″.
1 25 ton Hydraulic Jack.
1 Guy Derrick, 15 ton capacity, complete with guy ropes and fall.
5 Doz. Jones' round and square point shovels.
3 Doz. 8 to 9 lb. Clay Picks.
2 Cross Cut Saws, 5 ft.
2 Wood Boring Machines.
1 Doz. Pan-American Wheelbarrows, steel wheel.
8 No. 1 Columbus Scrapers with runners.
3 No. 6 Contractors' Plows.
3 Wood Skips, complete with chains.
½ Doz. brick hods.
1 No. 2 Diaphragm Pump with fittings complete.
1 Derrick Pole Hoisting Winch.
2 Lidgerwood Hoisting Engines, double cylinders 8 x 12, double drum.

Miscellaneous Derrick Fittings, Wire Ropes, Picks, Shovels, Hammers and all Sorts of Contractors' Supplies.

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Successors of the Late James Cooper

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CANADIAN

Contract Record

A Weekly Journal of Public Works, Tenders, Advance Information and Municipal Progress

This Paper Reaches Every Week the Town and City Clerks, Town and City Engineers, County Clerks and County Engineers, Purchasers of Municipal Debentures and Leading Contractors In All Lines Throughout Canada

VOL. 16. TORONTO, MONTREAL — FEBRUARY 14, 1906 — WINNIPEG, VANCOUVER No. 50

THE CANADIAN CONTRACT RECORD

PUBLISHED EVERY WEDNESDAY

As an Intermediate Edition of the Canadian Architect and Builder.

THE C. H. MORTIMER PUBLISHING COMPANY

of Toronto, Limited.

Subscription Price, $2 per annum, payable in advance.

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AGENTS WANTED—TO SOLICIT CONtracts for a street road or pavement possessing many advantages over our present roads. New in this country but successfully laid in Europe for the last thirty years. Address "Municipal," care CANADIAN CONTRACT RECORD, Confederation Life Building, Toronto, Canada.

WANTED

A first-class General Manager for a supply house; one speaking English and French fluently and with good all round knowledge of builders' and founders' requirements.

Excellent prospect for a man of ability to secure an interest in a live going concern with connections in Quebec, Ontario, North West and Maritime Provinces. Apply with references to

P. O. DRAWER 2330,
Montreal.

CITY OF REGINA

Tenders for New City Hall

The Corporation of the City of Regina will receive sealed tenders, marked "Tender for New City Hall", up till noon of FRIDAY, 16TH FEBRUARY, 1906, for the construction of a new City Hall in the City of Regina, Sask., according to plans and specifications prepared by Messrs. Dodd & Hopkins, Architects, Calgary, which may be seen at their offices at Regina, Sask., and Calgary and Edmonton, Alta., as well as at the Builders' Exchange in Winnipeg, Toronto and Montreal.

Each tender to be accompanied by a certified cheque drawn upon any chartered bank of Canada payable to the order of the City of Regina to the extent of 5 per cent. of the total amount of such tender, which will be forfeited should the Contractor fail to enter into a satisfactory contract when notified to do so.

The Contractor whose tender is accepted will be required to furnish a bond for $30,000.00 or three sureties for $10,000.00 each satisfactory to the City Council.

The City Council reserve the right to reject any or all tenders.

J. KELSO HUNTER,
Secretary Treasurer.

Regina, Sask., 24th January 1906.

Position Open

Wanted—A first-class, educated and experienced architectural draughtsman, with sufficient technical knowledge of construction to assume office charge and direct general architectural work. To the right man can offer first-class permanent position. Correspondence solicited from those who can fully meet the requirements named, no others need apply.

W. W. LA CHANCE, Architect,
P.O. Box 613, Regina, Sask.

Tenders Wanted

Tenders addressed to the Mayor and Council of the Town of Chatham, N.B., will be received up to Noon on WEDNESDAY, THE 28TH DAY OF FEBRUARY, 1906, for the necessary Steam and Electrical Apparatus for a new Light and Power Station in the Town of Chatham, N.B.

Plans and Specifications can be seen and copies obtained at the office of the Town Clerk or at the office of Lea & Coffin, Coristine Building, Montreal.

The lowest or any tender not necessarily accepted.

JAMES NICOL, Mayor. P. J. MACINTYRE, Town Clerk.

TENDERS FOR PORTLAND CEMENT

Sealed tenders, addressed "S. R. Armstrong, City Clerk, Peterborough, Ont.," and endorsed "Tenders for Cement", will be received up to FEBRUARY 20TH, 1906, for supplying 4,000 barrels more or less of Portland Cement. Tenderers will state whether cement is packed in sacks or barrels, net weight per sack or barrel, and price f.o.b. Peterborough. Sample tests will be made from consignments before acceptance. Delivery to commence not later than May 2nd, 1906. A marked cheque for an amount equal to 5 per cent. of total contract must accompany each tender. Specifications furnished on application. The lowest or any tender not necessarily accepted.

S. R. ARMSTRONG,
City Clerk.

Notice to Contractors

SEWERAGE SYSTEM EAST OF WOODBINE AVENUE; TORONTO, CANADA.

Tenders will be received by registered post only, addressed to the Chairman of the Board of Control, City Hall, Toronto, up to noon on Tuesday, March 6th, 1906, for the construction of Sewers, Pumping Stations, Septic Tanks, and Bacteria Beds for a system of sewerage east of Woodbine Avenue, Toronto, Canada.

Envelopes containing tenders must be plainly marked on the outside as to contents.

Plans may be seen, and specifications and forms of tender obtained at the office of the City Engineer, Toronto.

The usual conditions relating to tendering as prescribed by City By-law must be strictly complied with.

The lowest or any tender not necessarily accepted.

EMERSON COATSWORTH (Mayor),
Chairman Board of Control.

City Hall, Toronto,
January 24th, 1906.

Sealed Tenders

for the erection of a new building for Havergal College, Toronto, will be received at the office o G. M. MILLER & CO., Architects, Toronto, General Trust Building, up to 12 o'clock noon on WEDNESDAY, FEBRUARY 21ST, 1906.

The lowest or any tender not necessarily accepted.

CANADIAN PACIFIC RAILWAY

Tenders covering the work required in connection with Track-Laying, Bridging and Ballasting on the Sudbury branch between Romford and French River Crossing (40 miles) will be received by the undersigned up to noon on SATURDAY, MARCH 10TH, 1906.

Plans and specifications can be seen at the office of the Division Engineer of Construction, 112-118 King Street West, Toronto.

J. W. LEONARD,
Manager of Construction.

WATERWORKS PUMP AND BOILER

The Town of Meaford invites tenders until MARCH 6TH, 1906, for the supply and installation of:

(1st). One compound, duplex, inside plunger, direct-action Steam Pump, 12 × 18½ × 12 × 12.

(2nd). Pipes, Valves and Fittings.

(3rd). One cylindrical, horizontal, return tubular Boiler, 66 inches diameter × 12 feet long, with 98 3" tubes, capable of 125 lbs. working pressure.

Specifications and further particulars will be given on application to the undersigned.

GEO. G. ALBERY,
Town Clerk,
Meaford, Feb. 7th, 1906. Meaford, Ont.

CONTRACTS OPEN.

BURFORD, ONT.—Squire Grey is having plans prepared for a residence.

BOISSEVAIN, MAN.—The erection of a new school is under consideration.

PORT COLBORNE, ONT.—Plans have been prepared for a new cottage for Dr. Maury.

GLACE BAY, N.S.—The erection of a large central school building is under consideration.

LAKEFIELD, ONT.—The ratepayers will vote on a by-law to purchase an electric light plant.

ST. JOHN, N.B. — Nearly $30,000 has been subscribed for the Y.M C.A. building fund.

KENTVILLE, N.S.—St. Paul's Presbyterian congregation will probably build a new church.

NEW WESTMINSTER, B. C.—A. Swanson intends building a three-storey addition to the Fraser hotel.

BARRIE, ONT.—The Grand Trunk depot here will be remodelled and considerable cement work put in.

CHIPPAWA, ONT.—The by-law to provide $24,600 for a waterworks system will be voted on February 15th.

VASSAR, MAN. — Tenders are invited by E. F. Spicer, up to 28th inst., for erection of a school house here.

BRANTFORD, ONT. — John W. Shepparson is about to build a brick residence on Chatham street, cost $1,500.

VICTORIA, B. C. — The Board of School Trustees have asked the Council to provide $60,000 for erection of two new schools.

WOODSTOCK, ONT. — Plans are under consideration for improvements to the Collegiate Institute to cost $20,000.

ST. BONIFACE, MAN. — The site for the proposed new post-office has been transferred to the Dominion Government.

SMITH'S FALLS, ONT.—The Frost & Wood Company have decided to rebuild their works destroyed by fire last week.

COLLINGWOOD, ONT.—The plans of J. A. Ellis, architect, Toronto, have been accepted for a new Collegiate Institute.

MARKDALE, ONT.—Tenders are invited by C. W. Rutledge up to 17th inst. for erection of a brick Methodist church.

RAINY RIVER, ONT. — The ratepayers recently passed a by-law to raise $35,000 to install waterworks and sewerage systems.

CANNING, N.S.—Joseph Bigelow has completed plans for a vinegar factory to be built at Lower Canning by Aubrey and Walter Bishop.

GUELPH, ONT.—Tenders are about to be invited for the supply of sewer pipe. —Additional waterworks machinery will probably be installed.

HAMPTON, N.B.—The Hampton & St. Martin's Railway will ask the Government for aid in the extension of their road to the water front.

ST. LOUIS DE LOTBINIERE, QUE.—Rev. L. L. Paridas and others have formed a company to construct a waterworks system here.

ST. MARY'S, ONT.—J. C. Weiderhold, architect, will receive tenders up to 20th inst. for erection of a school in S. S. No. 5, West Nissouri.

MOOSE JAW, SASK.—The Methodist Quarterly Board have appointed a committee to secure plans for a new church to cost about $35,000.

CARMAN, MAN.—The Council are negotiating with H. N. Ruttan, C.E., Winnipeg, for a report on a fire protection system for this town.

CARBERRY, MAN.—The by-law to raise $15,000 to establish a municipal electric light plant will be submitted to the ratepayers on the 20th inst.

KAMLOOPS, B.C.—It is proposed to submit a by-law to the ratepayers to raise money for the extension of the electric light and waterworks plants.

LUNENBURG, N.S.—The Royal Bank of Canada have purchased property on corner of Duke and Pelham streets on which to erect a stone building.

KINGSTON, ONT.—Power & Son, architects, have prepared plans for a new jail to be built by the Counties Council of of Durham and Northumberland.

MEDICINE HAT, ALTA. — Tenders are invited by the Department of Public Works, Ottawa, up to February 26th, for erection of a post-office here.

CHARLOTTETOWN, P.E.I. — The Building Committee of St. Dunstan's Roman Catholic church have decided to proceed with the completion of the interior.

HIGHGATE, ONT.—J. E. Gillis, of Chatham, has purchased the building occupied by the Molsons Bank and will make improvements costing about $6,000.

CAYUGA, ONT.—The ratepayers will vote on a by-law to issue debentures to assist the Window Glass Machine Company, of Pittsburg, in establishing a $60,000 plant here.

SUSSEX, N.B. — In June last the ratepayers voted $25,000 for the erection of a new school, but the work has not been commenced owing to the difficulty of agreeing upon a site.

DALHOUSIE, N.B.—The Town will seek power from the Legislature to issue $70,000 of debentures for waterworks, sewerage and electric light systems. Willis Chipman, C.E., Toronto, is engineer.

NIAGARA FALLS, ONT. — J. H. Jackson, C.E., is preparing plans for the new works proposed by the water commissioners. The idea is to secure a greater head of water by a deep pit and larger forebay.

OWEN SOUND, ONT.—Forster & Clark, architects, have submitted several plans for an addition to the Collegiate Institute.

PORT ARTHUR, ONT. — M. B. Aylesworth, architect, has prepared plans for a new telephone exchange and other office buildings for the Commissioners.—The Town Treasurer has been instructed to offer for sale $3,000 of debentures.

WELLAND, ONT. — A delegation recently interviewed the Ontario Government regarding improvements to Lyons Creek. A plan will be prepared and an estimate of the cost made.—The Michigan Central Railway will build a new station here.

ST. CATHARINES, ONT. — The City Council have decided to take immediate steps towards the construction of a high level bridge across the Welland canal. The work is expected to cost about $100,000, which sum the ratepayers will be asked to provide.

PORTAGE LA PRAIRIE, MAN.—The Town Council have decided to ask legislation to issue debentures for $50,000 for the purchase of the electric light plant.—The erection of an addition to the hospital, to cost $17,000, is under consideration.

CALGARY, ALTA.—The Brackman-Kerr Milling Company have selected a site on which to build the proposed mill here.—Lawson & O'Gara, architects, are this week taking tenders on stone and brick veneer additions and alterations to Braemer Lodge, to convert it into a tourist hotel.

BRANDON, MAN.—The Brandon Brewing Company will erect a new building on Fourteenth street, of brick and steel, five stories, cost $75,000.—The Brandon Opera House Company has been formed to build an opera house here. John Hanbury is interested.

SASKATOON, SASK. — Drinkle & Wiley have asked for a franchise for electric lighting.—The question of sewerage and drainage was discussed at the last Council meeting, Mayor Clinkskell taking the ground that a separate drainage system would be necessary besides the sewer system.

SAULT STE. MARIE, ONT.—The Lake Superior Corporation contemplate making extensive additions to their plant and are now having plans prepared for two new open hearth furnaces to cost at least $250,000. They will further extend the Algoma Central and Manitoulin & North Shore Railways.

ST. STEPHEN, N.B.—F. A. Barbour, C.E., of Boston, has been conducting tests with a view of securing a water supply for Calais, Milltown and St. Stephen. It is proposed to secure the supply from Dennis Stream, four miles from this town, and to establish a pumping plant and construct a reservoir. The estimated cost is $120,000.

LONDON, ONT.—The Southwestern Traction Company have had plans prepared for head office building on Horton street, near Richmond, red pressed brick with white stone trimmings, 40 × 50 feet. —It is again reported that the Grand Trunk Railway Company have decided to build a new hotel here and that the plans have been drawn up in connection with the new depot.

PETERBORO, ONT. — W. Blackwell, architect, has prepared plans for a new fire hall, for which tenders will be invited immediately; estimated cost, $9,000.—The city desires bids for the supply of a stone crusher.—The City Engineer has been instructed to prepare plans for new bridge over the creek at Charlotte street, iron superstructure and cement abutments.

FREDERICTON, N.B.—F. A. Barbour, C.E., Boston, recommended the installation of a filtration plant in connection with the waterworks pumping station, at an estimated cost of $42,300. The recommendation has met with some opposition, and the Council recently decided to consider the matter at a special meeting to be called later.—A. J. Gregory, of St. John, is forming a company to build a saw mill on the old Estey site.—Tenders will shortly be invited for an addition to the Brunswick street Baptist church.

HALIFAX, N. S.—The congregation of St. Luke's cathedral have agreed to give to the Cathedral Corporation the present site on Morris street on condition that they begin the erection of a cathedral one year after the agreement is signed, to cost not less than $100,000. — The Board of Fire Commissioners have requested the City Council to ask the Legislature for power to borrow $100,000 for chemical engines and ladder trucks and $8,000 for Queen street engine house.

WINNIPEG, MAN. — Tenders are invited by the Dominion Government up to February 21 for veneering with brick the Immigration buildings in this city. Specifications at office of Joseph Greenfield, architect.—The Board of Police Commissioners are advertising for a site for a new police station. —Sewers are to be constructed on the following streets: Home street, from Portage avenue to Notre Dame avenue, cost $14,150; Pembina street, from Jessie avenue to Scotland avenue, cost $6,363; William avenue, from Dark street to McPhillips street, cost $2,199; Rosser avenue, from John street to Hugo street, cost $1,510.

FORT WILLIAM, ONT. — The Mount McKay & Kakabeka Falls Railway Company have been granted water power rights on the Kaministiquia river and will shortly proceed with the building of their road. C. W. Jarvis, James Murphy and J. L. Davidson are interested.—The C.P.R. have purchased the McIntyre property on which to build freight sheds.—At a mass meeting of citizens held last week, it was decided that immediate steps should be taken to secure a water supply from Lock Lomond, at a cost of about $250,000.—D. Smith is this week taking tenders on a two-storey brick and stone building for the Superior Printing Company.

MONTREAL, QUE.—The Montreal Street Railway Company have purchased a large tract of land east of their Hochelaga sheds on which a large power house will be constructed.—Henry Morgan & Company have purchased the property at north end of Victoria Square, corner of Beaver Hall Hill and Latour street, until recently occupied by S. Davies &

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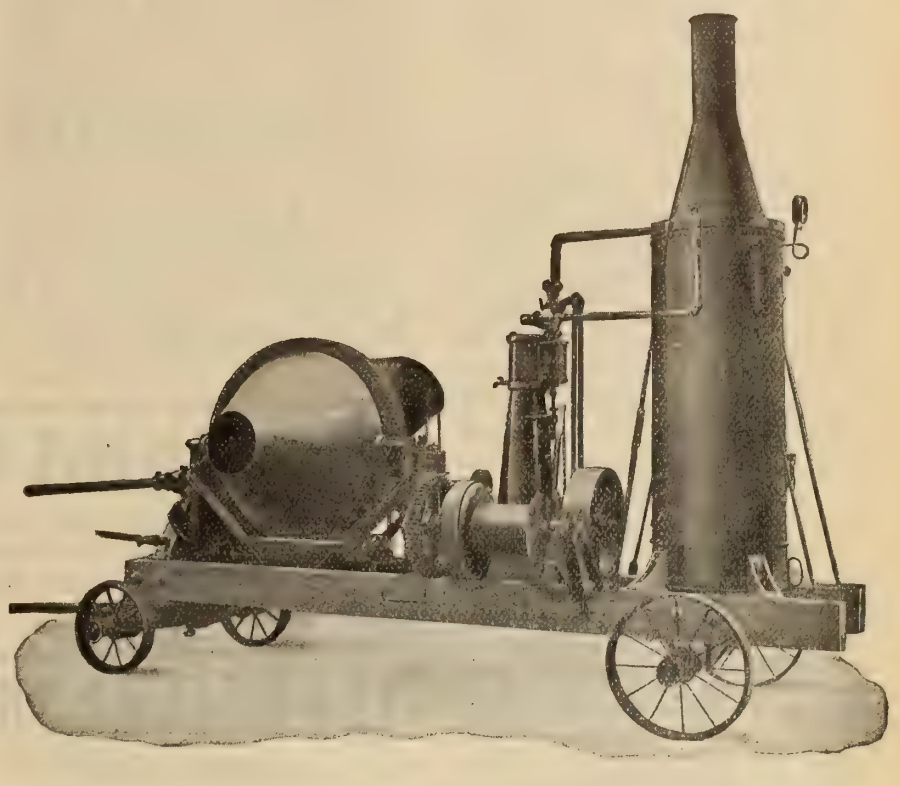

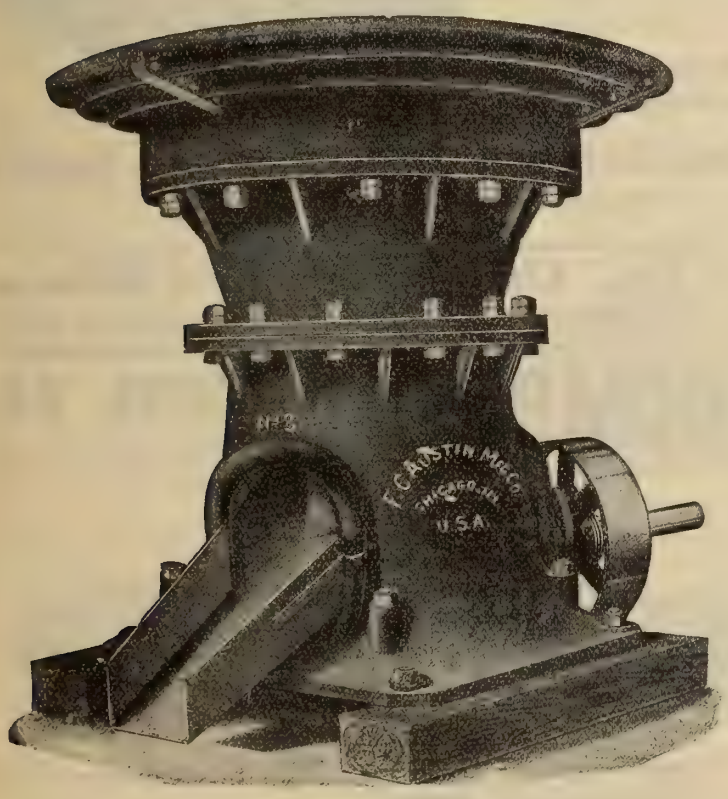

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Sons. It is their intention to completely remodel the building.—The City Council will likely consider at an early date plans for an improved water supply. One of the schemes mentioned is to tap Lake Kilkenny, which is situated 35 miles north of Montreal.

VANCOUVER, B.C. — Parr & Fee, architects, have completed plans for a four-storey warehouse to be built at corner of Columbia avenue and Cordova street for McLennan, McFeeley & Company.—The congregation of St. John's Presbyterian church intend building a new edifice ; Rev. A. J. McGillivray, pastor.—Dalton & Eveleigh, architects, are this week taking tenders on erection of a four-storey and basement building on Grenville street for the Hudson's Bay Company.—The Water Committee have decided to engage a first-class hydraulic engineer to carry out the proposed improvements to the waterworks system, which are estimated to cost $750,000.—C. E. Cartwright, Division Engineer C. P. R., is this week taking tenders on construction of freight sheds.

HAMILTON, ONT.—W. W. Stewart, architect, has practically completed plans for the new armories here and it is said that tenders will be invited at once; estimated cost, $175,000.—William Dillion has had plans prepared for a new hotel at 325 Bay street north.—Edward New has purchased 13 lots in the west end on which to build houses. — Fred Taylor has purchased the north-east corner of Bay and Jackson streets for building purposes.—E. C. Horn & Company, New York, are said to be preparing plans for a new theatre to be built on Merrick street by John and William Stroud.—The Fire & Light Committee have recommended the erection of a new fire station in the east end, at an approximate cost of $18,000. — Tenders are invited up to the 19th inst. for steam heating and ventilating and electric elevator at the City Hospital. Plans at office of A. W. Peene, architect.

OTTAWA, ONT.—John Henderson, City Clerk, will receive tenders up to Tuesday, 20th inst., for erection of a Fat Stock Show building at Lansdowne Park. Plans at office of Northwood & Noffke, architects, 26 Central Chambers. —Tenders are invited by L. K. Jones, Secretary Department of Railways and Canals, up to 24th inst., for the supply of British Columbia fir dimension timber required for the Rideau Canal. — The Commissioners of the Transcontinental Railway are asking for tenders up to Monday, March 12th, for the construction of the following sections of the road: 1, from Winnipeg to Peninsula Crossing, a distance of 245 miles; 2, from the city of Quebec to La Tuque, 150 miles; 3, a steel viaduct about 3,000 feet long across the Cap Rouge Valley near Quebec city. Plans may be seen in the office of the Commissioners in this city, also in the office of the District Engineer at Kenora, Ont., for the first section, and in the office of the District Engineer at Quebec for the second section. The cash deposits for the three sections respectively are $400,000, $225,000 and $35,000. Tenders are to be addressed to P. E. Ryan, Secretary of the Commission.—The Grand Trunk Pacific Branch Company is seeking incorporation for the purpose of building branch lines to connect with the Transcontinental Railway. Twenty-three branch lines are proposed.

TORONTO, ONT.—The Bank of British North America have purchased the south-east corner of King and Dufferin streets and will erect a new bank building thereon.—R. Kennedy, of Lind-

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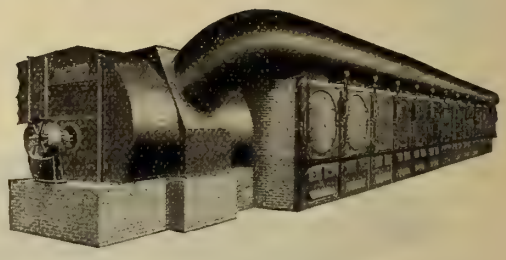

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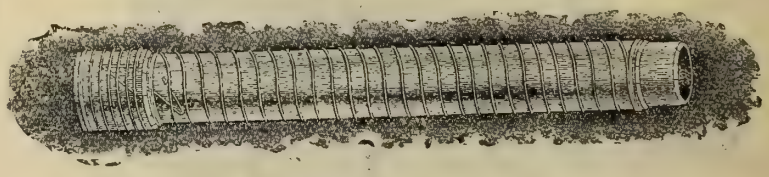

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say, purposes building two residences on east side of Grace street.—George H. May, 50 Front street east, is asking for tenders up to Tuesday, 20th inst., for the supply of 50,000 barrels of Portland cement f.o.b. cars or dock Toronto, delivery to be made this season.—The Grand Chapter of the Cathedral of St. Albans have instructed an architect to prepare detailed plans for the next section of the cathedral, the intention being to proceed with the work at once.—The Caledonia Skating & Curling Club have decided to build a new hockey rink on the Crawford Estate property on Mutual street. The building will have a seating capacity of 7,000, and it is said that an artificial ice plant will be installed.—The Board of Control are asking for tenders up to Tuesday, March 6th, for supply of a steam fire engine. Specifications at office of the Fire Department, Richmond street fire hall.—The sum of $60,000 has been placed in the estimates by the Property Committee of the Board of Education for a High school in the First Ward, and a similar amount for the enlargement of Harbord street Collegiate Institute and reconstruction of the heating and ventilation of the present system. For a new Technical School the sum of $150,000 has been requested, while almost $200,000 is asked for additions to public schools.—Tenders are wanted at 2 Portland street for all trades for erection of a stone and brick residence.—Contracts will be awarded within a few days for a new Science building in connection with McMaster University.—Mr. Stapleton Caldecott has purchased land on which to build a residence.—The Board of Works will shortly advertise for tenders for the construction of a large number of pavements and sidewalks.—The City Engineer has submitted his estimates for 1906. He asks for $250,000 for an additional 15,000,000 gallon waterworks pumping engine, $90,000 for new bridges at Shaw and Crawford streets, $86,292 for a 20-inch main on Shaw, Arthur, Argyle, Dufferin, Noble, Brock and Queen streets, $14,000 for a 12-inch main on Roncesvalles avenue, and $16,000 for a 12-inch main on certain streets in Rosedale, also for $1,854 for a stone crusher and $10,850 for two public lavatories.—The congregation of North Parkdale Methodist church, of which Rev. J. F. German is pastor, will shortly begin the erection of a new edifice on corner of Sorauren avenue and Galley avenue, estimated cost $50,000.—Hon.

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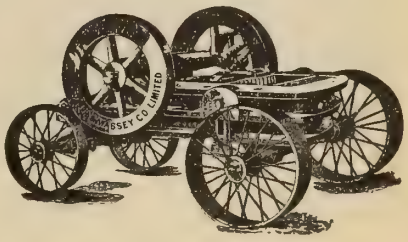

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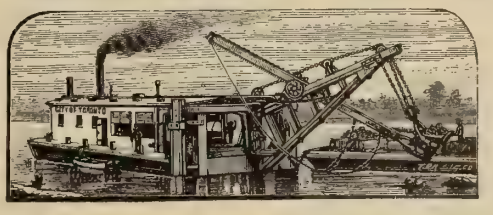

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Dr. Reaume, Minister of Public Works, is looking into the question of installing an electric light plant in the Parliament Buildings.

CONTRACTS AWARDED.

DEER PARK, ONT. — Addition to Presbyterian church: Ramsay & Fisher, contractors.

CHARLOTTETOWN, P. E. I.—Intercolonial railway station: A. E. Wallberg, C. E., Montreal, contractor.

TUCKERSMITH, ONT.—Steel bridge over Silver Creek: Hill & Company, Mitchell, successful tenderers.

GANANOQUE, ONT.—$15,000 town debentures: Canadian Securities Company, Toronto, purchasers, $14,611.

BARRIE, ONT. — Heating municipal buildings: James Smart Manufacturing Company, Brockville, successful tenderers.

WINNIPEG, MAN. — The tender of Crossley Bros., of Manchester, Eng., for the supply of a gas producer plant for the high pressure system has been accepted; price, $114,156.

OWEN SOUND, ONT.—Poulett street bridge: Superstructure, Hamilton Bridge Works Company, $4,610; substructure, Jenks & Dresser, $5,600; filling approaches, John Beauder, 33⅓ cents per cubic foot.

TORONTO, ONT. — Construction of sewers: Shaw street, from Bloor to Dupont, J. F. Connolly, $8,419; Grace street, from 97 feet south of College to 500 feet further north, Toronto Contracting & Paving Company, $1,154.

GUELPH, ONT. — W. A. Mahoney, architect, has let contracts as follows for double house for A. McHardy, corner of Kent and Glasgow streets: Thos. Matthews, stone and brick; J. J. Mahoney, plastering; Wm. Husson, carpentry; H. E. Pass, painting; Wm. Sunley, iron work and furnace; Mahoney Bros., plumbing, cost, $2,800.

NEW COMPANIES.

Consumers Coal Company, Limited, Toronto, incorporated, capital $100,000. Directors, Gerald Nash, C. B. Edler and J. H. Hammill.

Capital Scale Brass & Iron Foundry Company, Limited, Ottawa, incorporated, capital $40,000. Directors, R. B. Gorman, Frederick Miller and others.

Anthony Wire Fence Company of Canada, Limited, Windsor, Ont., incorporated, capital $100,000. Directors, D. P. Anthony, T. C. Harris, and others.

Finch Electric Light & Lumber Manufacturing Company, Limited, Finch, Ont., incorporated, capital $50,000. Directors, M. A. Smirl, H. McMillan and others.

City & Suburban Home-Building Company, Limited, Toronto, incorporated, capital $40,000. Directors, Albert Mearns, F. L. Whatley, and H. N. Baird.

Quebec & Ontario Lumber Company, Ottawa, Ont., incorporated, capital $20,000, to manufacture lumber, etc. Promoters, G. H. Phillips, H. W. Gay, and others.

Anthes Furniture Company, Limited, Berlin, Ont., incorporated, capital $100,000, to manufacture furniture. Directors, J. I. F. Anthes, J. C. Breithaupt, A. L. Breithaupt, and others.

The Indestructible Brick, Limited, Toronto, incorporated, capital $100,000, to manufacture brick, stone, cement, etc. Directors, T. W. Townsend, H. L. Douglas and Charles Wilkinson.

Section Acetylene Machine Company, Limited, Belleville, Ont., incorporated, capital $15,000, to manufacture acetylene machines, etc. Directors, J. S. Jenkin, W. B. Riggs and N. Jenkin.

Canadian Art Stone Company, Limited, Toronto, incorporated, capital $50,000, to manufacture and deal in artifical stone, building material, etc. Directors, J. E. Murphy, J. W. Campbell, H. H. Hogue, and others.

Brantford Roofing Company, Limited, Brantford, Ont., incorporated, capital $100,000, to manufacture roofing materials, etc. Directors, Daniel McHenry and C. L. Millhouse, of South Bend, Indiana, W. D. Schultz, of Brantford, and others.

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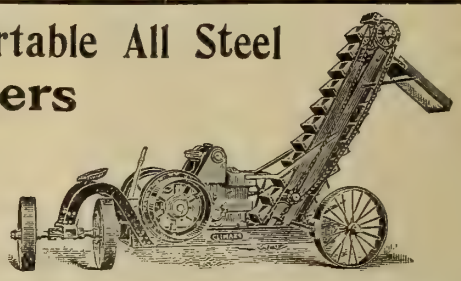

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Company, Limited, Peterboro, Ont., incorporated, capital $200,000, to manufacture machinery, develop electric power, etc. Directors, J. E. Flavelle, C. B. McAllister, W. M. Flavelle and G. M Roger.

Peter McNabb has been appointed manager of the waterworks system at Stratford, Ont.

The works of the Hanover Portland Cement Company, Hanover, Ont., are being remodelled and the output increased from 150 barrels a day to about 400 barrels.

The National Portland Cement Company, Durham, Ont., have elected the following directors: W. H. Hoyle, M.P.P., Cannington; Gilbert McKechnie, Durham; R. H. McWilliams, Owen Sound; A. F. Maclaren, M.P., Stratford; Valentine Ratz, M. P., Parkhill; S. F. McKay, Woodstock; C. W. Dyer, St. Thomas.

A striking instance of the harmlessness of acetylene gas is related by H. O. Lamson, of Providence, R.I. He was called to a Catholic school, where he had installed an acetylene plant, to discover, if possible, a leak which existed. In the room occupied by a servant he found the gas jets open, and upon the servant being called it was learned that she came from the country and was not accustomed to the use of gas. She had been occupying the room for nearly a month and had blown the gas out each night. She said she had noticed a peculiar odor, but did not know what it was and had suffered no unpleasant consequences. She is a living witness to the freedom from the danger of asphyxiation where acetylene is employed for lighting.

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							Neat.					3 (Sand) to 1 (Cement)				
					Initial	Final	1 dy.	7 dys.	28 dys.	3 mos	1 yr.	1 dy.	7 dys.	28 dys.	3 mos.	1 yr.
1903	20	O.K.	3.135	2.1	162	345	307	701	783	827	*	74	214	299	367	*
1904	44	O.K.	3.150	2.0	132	342	300	744	848	914	938	86	62	354	401	427

* Tests for 1 year were not completed when records closed. 1905 report not yet issued.

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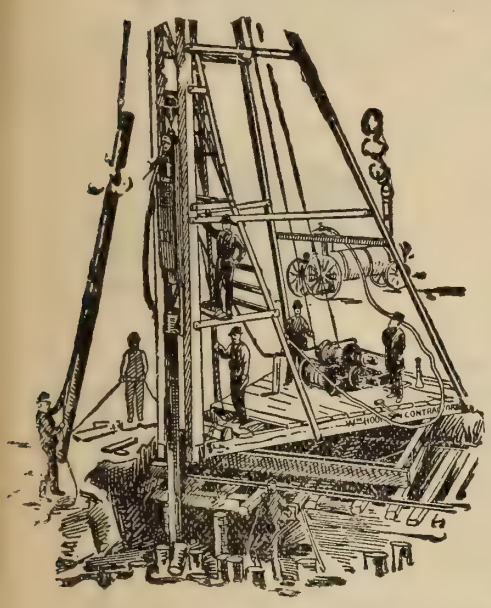

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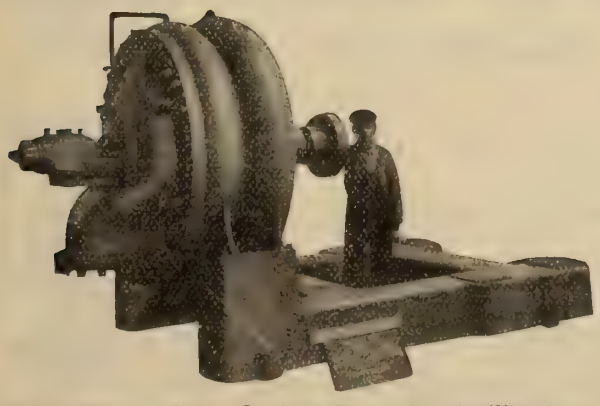

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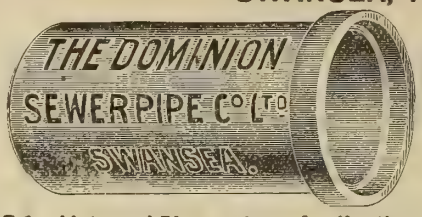

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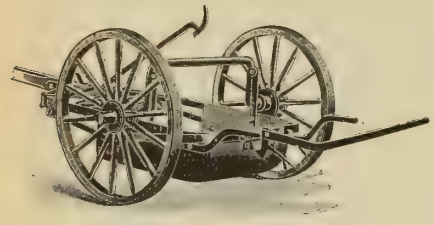

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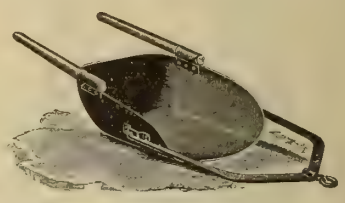

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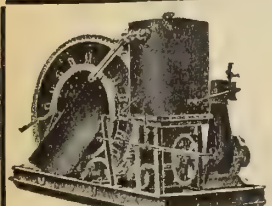
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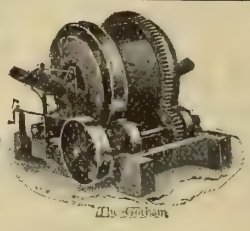
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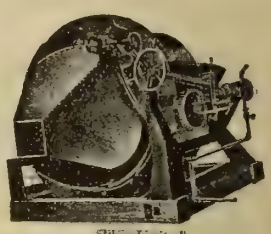
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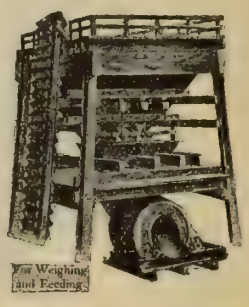
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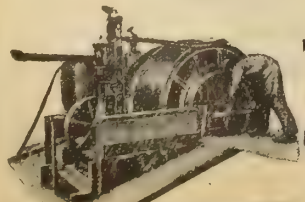
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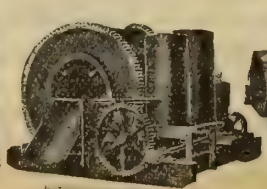
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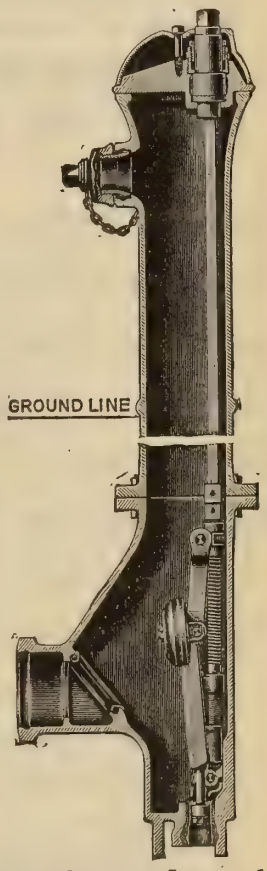

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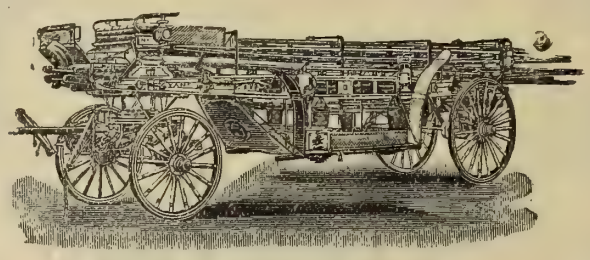

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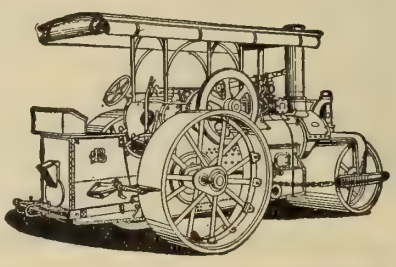

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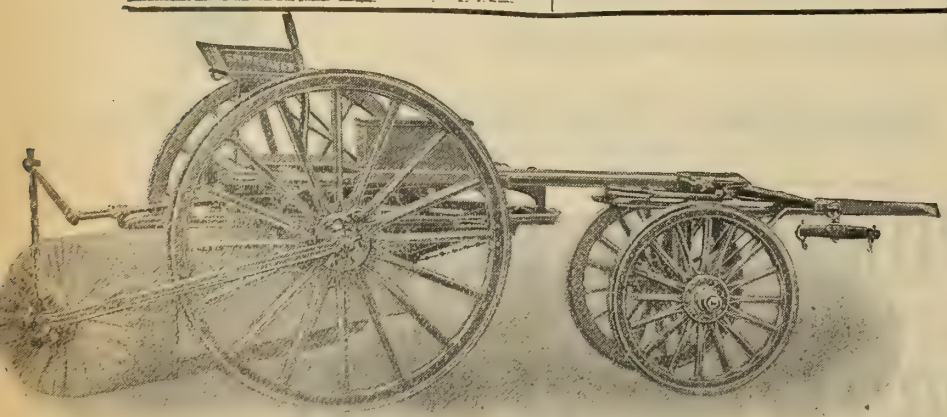

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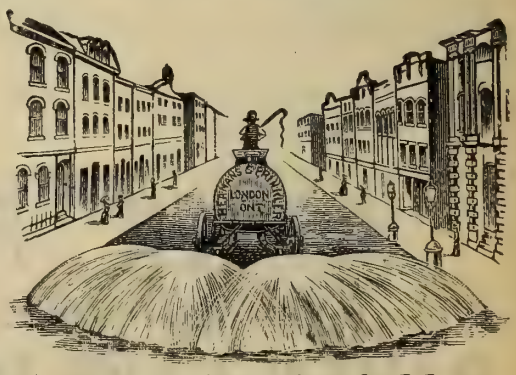

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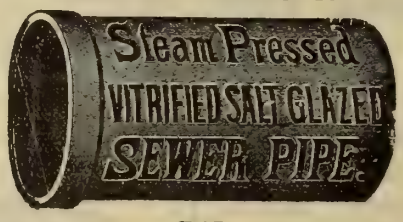

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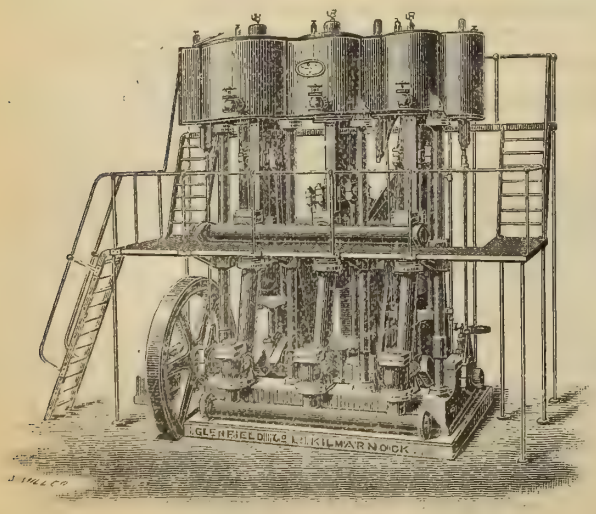

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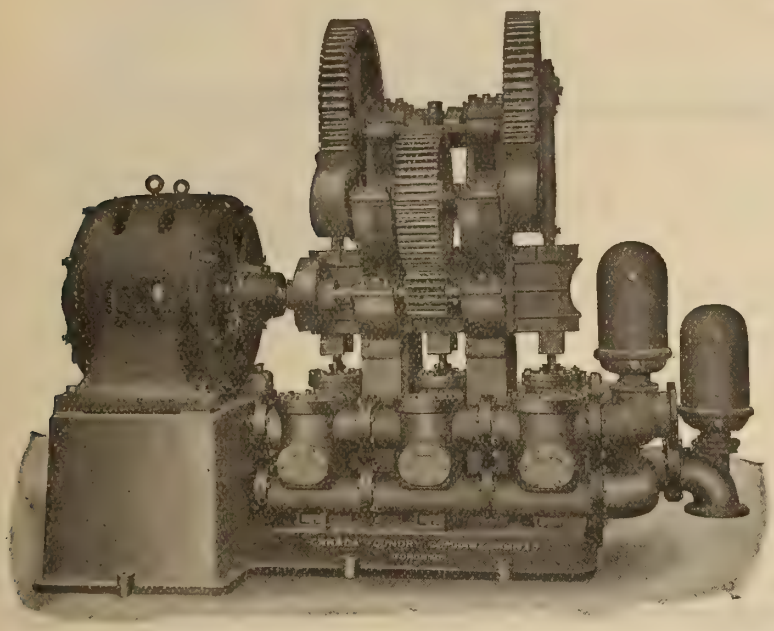

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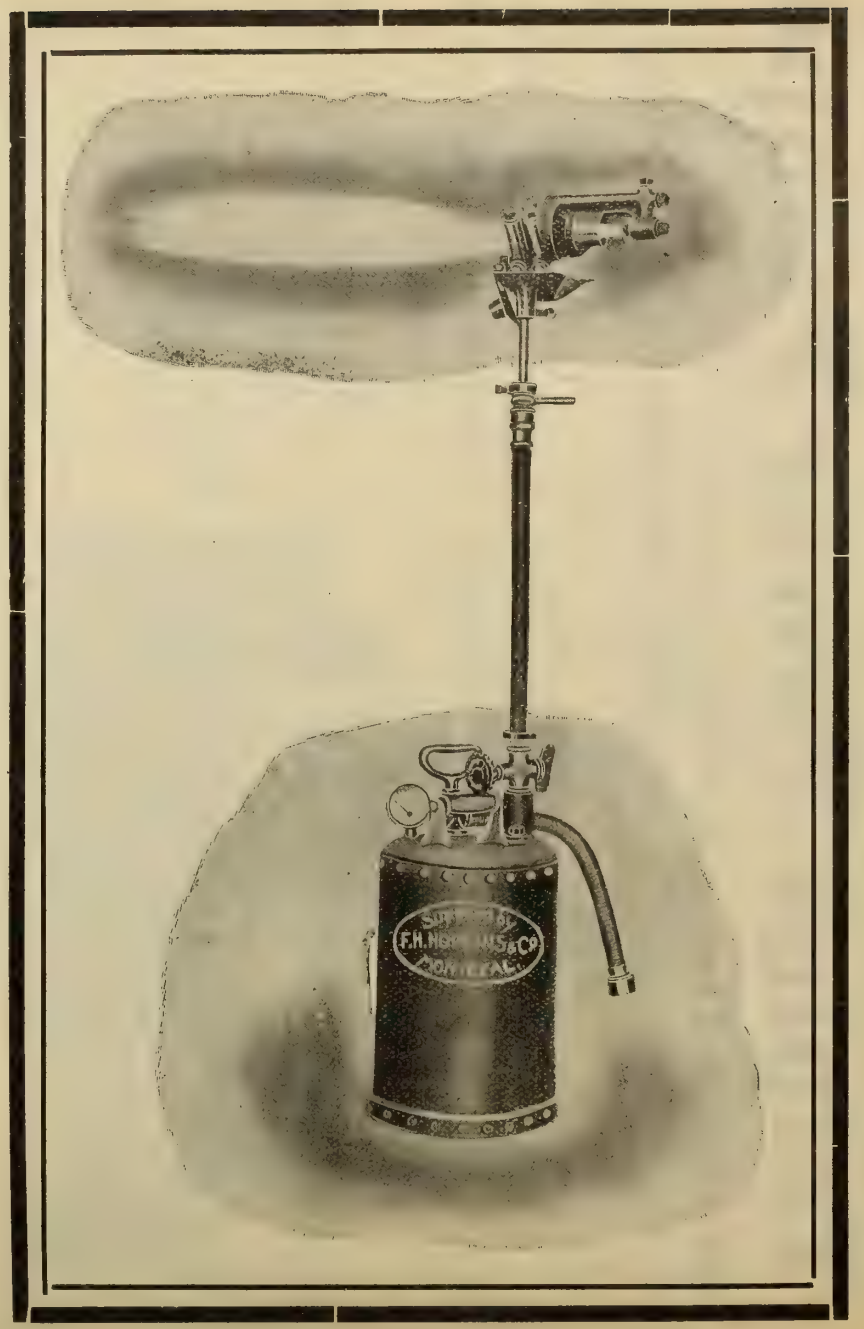

CANADIAN

Contract Record

A Weekly Journal of Public Works, Tenders, Advance Information and Municipal Progress

This Paper Reaches Every Week the Town and City Clerks, Town and City Engineers, County Clerks and County Engineers, Purchasers of Municipal Debentures and Leading Contractors In All Lines Throughout Canada

VOL. 16. TORONTO, MONTREAL — FEBRUARY 21, 1906 — WINNIPEG, VANCOUVER No. 51

THE CANADIAN CONTRACT RECORD
PUBLISHED EVERY WEDNESDAY

As an Intermediate Edition of the Canadian Architect and Builder.

THE C. H. MORTIMER PUBLISHING COMPANY
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W. W. LA CHANCE, Architect,
P.O. Box 613, Regina, Sask.

City of Fredericton

Sealed bids for furnishing, delivering and erecting the Sewage Pumping Plant, addressed to the City of Fredericton, N.B., and endorsed "Proposals for Furnishing, Delivering and Erecting the Sewage Pumping Plant," will be received at the office of the City Clerk, City Hall, until eight o'clock p. m. of THURSDAY, THE FIRST DAY OF MARCH, 1906. Each bid must be accompanied by a certified bank check for $250. Plans and specifications may be seen at the office of the undersigned. The city reserves the right to reject any and all bids or to accept any bid.

J. W. McCREADY,
City Clerk.

TO CONTRACTORS

Tenders will be received at the office of the undersigned until 5 p.m. FRIDAY, FEBRUARY 23RD, for Store Building on Queen St. East, for John S. Lucas, Esq.

Lowest or any tender not necessarily accepted.

SYMONS & RAE, Architects,
15 Toronto St.

Debentures for Sale

Sealed tenders will be received by the undersigned up till 6 o'clock p.m., THURSDAY, THE 22ND DAY OF MARCH, 1906, for Town of Renfrew Twenty and Thirty Year Debentures amounting to $44,640.10 (this amount includes interest to end of term).

For full particulars write the undersigned.

JAS. K. ROCHESTER,
Town Clerk,
Renfrew, Ont.

CANADIAN PACIFIC RAILWAY

Tenders covering the work required in connection with Track-Laying, Bridging and Ballasting on the Sudbury branch between Romford and French River Crossing (40 miles) will be received by the undersigned up to noon on SATURDAY MARCH 10TH, 1906.

Plans and specifications can be seen at the office of the Division Engineer of Construction, 112-118 King Street West, Toronto.

J. W. LEONARD,
Manager of Construction.

Tenders for Steel Bridge

Tenders will be received up to FRIDAY, MARCH 9TH, for the erection of a new Steel Bridge over the River Speed in Guelph Township known as "Carrahers Bridge". Length between abutments 70 feet, 12 foot roadway clear of wheel guards, 10 feet above water. Contractors to submit their own plans and specifications with tender, stating time of completion, and with a ten per cent. deposit for satisfactory completion.

JAMES LAIDLAW,
Clerk Guelph Township,
Box 10:8, Guelph, Ont.

CITY OF BRANDON

Tenders for Cement

Sealed tenders, addressed to "The Chairman of the Board of Works, Brandon, Man.", and endorsed "Tender for Cement", will be received by the undersigned until 6 o'clock p.m. on THURSDAY, APRIL 12TH, 1906, for supplying from 5,000 to 7000 bbls. Portland cement. Specifications and form of tender may be obtained on application to W. H. Shillinglaw, City Engineer, Brandon, Man.

The City Council does not bind itself to accept the lowest or any tender.

GEO. F. SYKES,
Sec'y Treas.

Brandon, February 15th, 1906.

Town Engineer Wanted

The Town of Fort William, Ontario, will receive applications until 26TH FEBRUARY, 1906, for the position of Town Engineer. Applicants will state experience, qualifications and salary expected.

A. McNAUGHTON,
Town Clerk.

To Contractors

Tenders, addressed to the Secretary of the Board of Public School Trustees of the Town of Cobourg, Ont., will be received up to noon of SATURDAY, MARCH 3RD, for the several trades works required in the erection and completion of a Central School Building. Plans and specifications may be seen at my office, Town Building, or at the offices of Power & Son, Architects, Kingston.

Lowest or any tender not necessarily accepted.

ALEX. POE, Secretary,
Board of Public School Trustees,
Cobourg, Ont.

CONTRACTS OPEN.

ROSEDALE, B. C.—A new grist mill will be built here.

HIGH RIVER, ALTA.—A new flour mill is soon to be established here.

VONDA, SASK. — A Presbyterian church will be erected here in the spring.

THAMESVILLE, ONT. — A brick school house will be built at McKay's Corners.

PRINCE ALBERT, SASK. — J. B. Truscott will build a residence, to cost $2,500.

SUMMERSIDE, P. E. I.—The Presbyterian church is to be extensively repaired.

PERTH, ONT. — An envelope factory of large capacity will be established here soon.

PORT COLBORNE, ONT. — W. J. Saurin intends building a fine house on Clarence street.

EAST TORONTO, ONT.—An addition is to be built to Mary street school, to cost $16,000.

SHOAL LAKE, MAN. — A brick veneer school house is to be constructed here in the spring.

ELM CREEK, MAN.—It is stated that the Grand View Hotel will be enlarged this year.

FORT WILLIAM, ONT. — The Town Council will sell $76,000 4½ per cent. debentures.

SHUBENACADIE, N. S.—A new Presbyterian manse will be built during the coming summer.

LETHBRIDGE, ALTA.—The Hudson Bay Company have taken tenders for a new store here.

FITZROY HARBOR, ONT.— The Township Council have decided to erect a new town hall this season.

EAST BAY, N.S.—A new wharf or extensive repairs to the old one will soon

be undertaken ; also repairs to the sluice bridge.

REDVERS, SASK.—Johnston Bros. are making plans for the enlargement of their store.

BASS RIVER, N.S. — A new manse will be built here this season by the Presbyterian congregation.

DRAYTON, ONT. — The members of the Anglican church purpose building a new church this spring.

LONDON, ONT.—The construction of a trunk sewer is recommended by the Board of Works, to cost $35,000.

BARRIE, ONT.—J. A. Craig intends building a brick residence on John street. Thomas Kennedy is preparing the plans.

ENDERBY, B. C.—F. B. Moffat is endeavoring to arrange for the erection of a large flour millwithelevatoraccommodation.

McKELLAR, ONT. — Archie R. Jackson will receive tenders until March 1st for the extension of the Agricultural Hall.

MILLBROOK, ONT.—Mrs. Whyte and R. Deyell have purchased two lots on which residences are to be built next summer.

ROSTHERN, SASK. — It has been decided to raise $5,000 to erect an addition to the school and install a system of heating.

EARLTOWN, N.S.—John W. Logan, of Truro, intends building a saw mill here for the manufacture of hardwood flooring.

EGANVILLE, ONT.—A by-law was passed here authorizing the Council to raise $10,000 by debentures for erection of a town hall.

STRATFORD, ONT.—Knox Church is asking for plans for a Sabbath School building. Particulars may be had from W. A. Adams.

WATERFORD, ONT. — A by-law was carried here to loan $15,000 to the Lloyd-Thomson Automatic Wire Weaving Company.

KINGSTON, ONT.—It is expected that a modern laundry will be built to replace the one destroyed by fire at Rockwood Asylum.

HINTONBURG, ONT. — The Public and Separate School Boards are preparing to meet the demand for greater accommodation.

ESQUIMALT, B.C. — It is understood that the Capital City Canning & Packing Company intend building a cannery here this year.

MOOSE JAW, SASK. — Another school is to be built to cost $7,000.—A new Y. M. C. A. building will be erected here at a cost of $40,000.

RAINY RIVER, ONT. — Tenders will be received by H. G. Graham until February 27th for boring an artesian well on the school property.

BATTLEFORD, SASK. — J. E. Beliveau has decided to build a large three-storey hotel on the corner of First avenue and 22nd street.

COLLINGWOOD, ONT. — T. Long & Bro. have decided to erect a large elevator, warehouse and cold storage plant on Pine and First streets.

SEAFORTH, ONT.—Extensive improvements in draining, paving, etc., are to be made on Main street from Goderich street to the G.T.R. tracks.

DRESDEN, ONT.—The ratepayers will vote on a by-law to provide $25,000 to assist A. B. Turner, of Toronto, in building a twine factory here.

CHATHAM, ONT. — A deputation from Raleigh Township have asked Premier Whitney for assistance for the Dauphin and Pipe drainage scheme.

DAVISVILLE, ONT.—At a recent meeting of the School Board, Architect Gray was instructed to complete plans for the addition to the school here.

MIDWAY, B.C.—The Kettle Valley Railway will apply to Parliament for power to extend its railway from Midway to Hedley with branch to Penticon.

SYDNEY, N. S.—The Cape Breton Coal, Iron and Railway Company propose constructing a bridge across the Mira River, county of Cape Breton.

EDGAR, ONT.—Thomas Kennedy, architect, Barrie, will receive tenders until March 1st for a public school house, to be built of reinforced concrete.

KAMLOOPS, B.C.—Messrs. Ramsay & Philip have purchased a site, corner Victoria street and Second avenue, on which they purpose building a brick block.

PETROLIA, ONT.—The plans of J. L. Wilson, architect, Chatham, have been accepted for the new public school to be built here, at an estimated cost of $16,000.

MARQUETTE, MAN. — The ratepayers of Prairie district have passed a resolution to build a new school, to cost about $2,000. The trustees are getting plans and estimates.

CHARING CROSS, ONT.—Robert Wilson is asking for tenders, until Feb. 24, for the erection of a brick and stone residence. J. L. Wilson & Son, Chatham, are architects.

ST. JOHN, N.B.—The report of Ross & Holgate, consulting engineers, Montreal, on the establishment of a civic lighting plant and water power at Silver Falls, has been received.

PORT ARTHUR, ONT. — Forty acres of land overlooking the bay are said to have been acquired by a New York syndicate for the purpose of establishing a sanitarium.

ALMONTE, ONT. — The Bank of Montreal have bought the property, corner of Mill and Brae streets, and intend replacing the present building by a fine stone structure.

PALLISER, B. C.—Work has been commenced by the C.P.R. on a new tunnel through an immense clay cliff west of this place. It is to be concrete lined and to cost $100,000.

BERLIN, ONT. — A site has been secured and plans are being prepared for the new button factory to be established here. Those interested are Geo. Schler, D. B. Deteveiler and M. B. Shantz.

INDIAN HEAD, SASK. — William Spurrell, of Alix, is preparing to build a large three storey brick hotel, corner Peace and Second streets, to cost $20,000. Cannell & Spencer are the architects.

ASHCROFT, B. C.—E. L. Drewery, C. S. Riley and Herbert Crowe, all of Winnipeg, are applying for permission to build a railway from this place to Fort George, a distance of about 300 miles.

QUEBEC, QUE.—The Sun Life Insurance Company are negotiating for the purchase of the old building, corner St. Peter and St. James streets, on which to erect an eight-storey office building.

SMITH'S FALLS, ONT.—A by-law will be submitted to the ratepayers to assist the Frost & Wood Company in rebuilding their works. The new buildings will be fireproof and four stories high.

YARMOUTH, N.S.—The Yarmouth Telephone Company will make application to the Legislatature for incorporation, giving them power to construct and operate telephone lines in the County of Yarmouth.

MARKHAM, ONT.—Arrangements are being made for the construction of a bridge across the Rouge River, to cost about $14,500. It will be built under the direction of James McDougall, County Engineer, Toronto.

STEVESTON, B. C. — A new salmon canneryisto be erected soon, on thenorth side of the river between Phœnix and the Canadian Pacific cannery, to cost about $20,000. R. V. Winch, Vancouver, is interested.

ST. THOMAS, ONT.—The Board of Management and Building Committtee of the Church of Christ have decided to build a new church, corner Railway and Elizabeth streets.— W. E. Idsardi purposes erecting a block of stores corner Railway and Talbot streets.

FORT FRANCIS, ONT.—The Minnesota Canadian Bridge Company will make application to Parliament at the next session for incorporation and for power to construct a bridge across the Rainy River near Pither's Point.

FREDERICTON, N. B.—The City Council have decided to present a bill to the Legislature to empower them to issue debentures not exceeding $45,000 to establish a filtration plant in connection with the present waterworks system.

VERNON, B. C.—Work will soon be started on the new C.P.R. steamer at the Landing for the Okanagan lake service. The cost will be $90,000. With additional docks and barges the C. P. R. will spend about $150,000 at the Landing this season.

BRANTFORD, ONT.—A new school is proposed, to cost about $25,000. Extensive improvements on other schools of the city are contemplated. — Last January the ratepayers voted $45,000 for additions to two schools. It is now proposed to spend the major portion of the amount in building an entire new school.

EDMONTON, ALTA.—The Blowey-Henry Furniture Company intend building a store five stories high. — The Edmonton Pressed Brick Company will install a dry press machine.—The City Engineer's department is busily engaged on plans for three miles of street railway line to be constructed this summer.

PORT HOPE, ONT.—J. W. Sanders, Town Clerk, will receive tenders until February 26th for the remodelling of the Central fire hall. Information from C. A. Merrifield. — The Town Council are applying to the Legislature for permission to raise $10,000 by debentures for the establishment of a municipal electric light plant.

TORONTO JUNCTION, ONT. — The following building permits have been issued: Robert Amos, brick and concrete dwelling, Uttley street, cost $1,400; R. Kemp, two-storey brick store and dwelling, Quebec avenue, cost $2,000. —The C.P.R. has purchased a block of land north of their tracks, west of Elizabeth street, to which site they intend soon to remove their shops.

CALGARY, ALTA.—The City Council have decided upon the construction of a trunk sewer to cost about $70,000 and the extension of the electric light plant. The Waterworks Committee have recommended that a by-law be submitted to the ratepayers to raise $100,000 for waterworks improvements, including the removal of the pumping station to a point further up the Bow river and the construction of a reservoir.

NIAGARA FALLS, ONT. — Plans for the spillway and overflow building of the Ontario Power Company, drawn by Green & Wicks, of Buffalo, N.Y., have been approved by the Park Commissioners.—The Niagara Frontier Bridge Company has been formed for the object of building a new bridge across the Niagara River, work on which is to be begun before December 31st, 1906. James P. Murray, president of the Toronto Carpet

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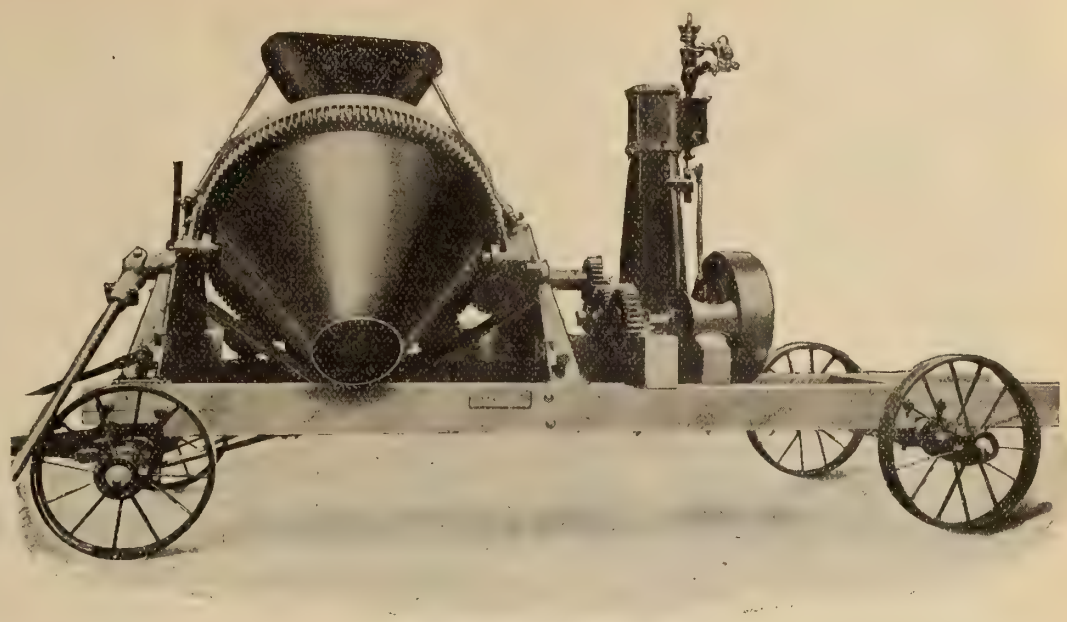

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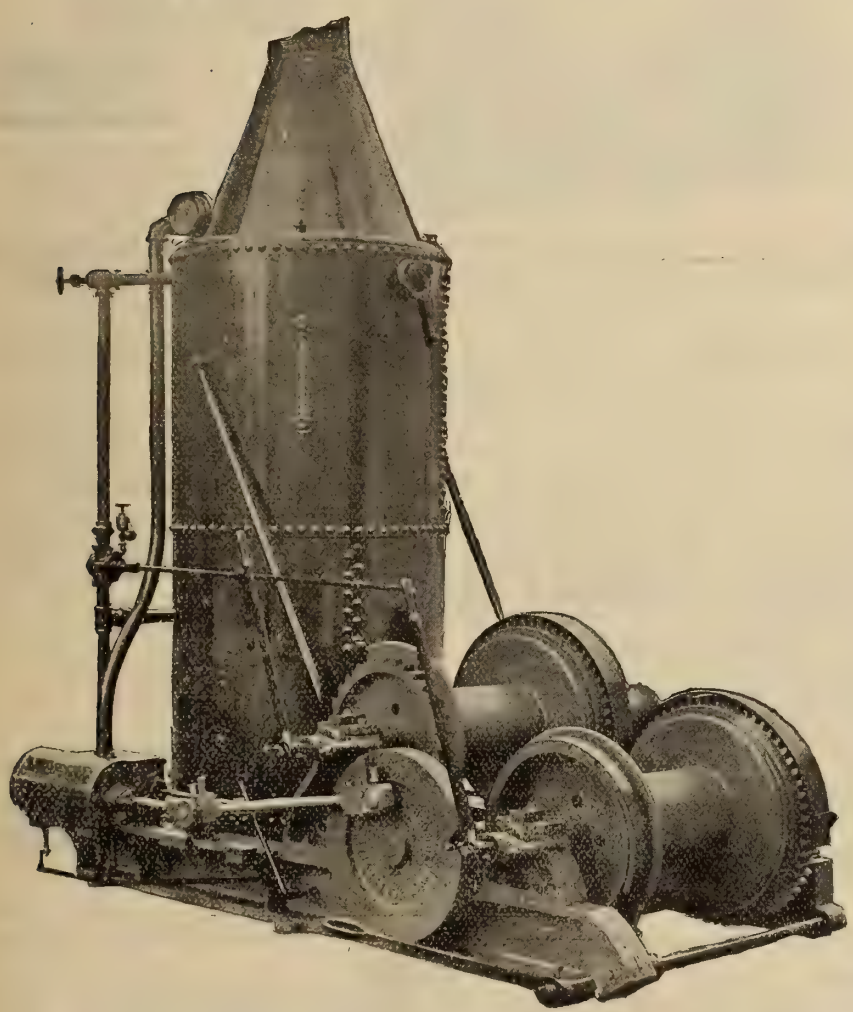

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BRANDON, MAN. — The School Board have decided in favor of submitting a by-law to the ratepayers to borrow $80,000 for the following purposes: New Collegiate Institute, $40,000; eight-roomed school in Ward 5, $25,000; two-roomed school north of C.P.R. tracks, $5,000; repairs to Central school, $5,000; unpaid balance, $5,000. —The Brandon Creamery Company will build a new plant on Rosser avenue, the work of construction to be commenced early in the spring.

MONTREAL, QUE. — The Kemp Manufacturing Company, Toronto, have purchased a site on St. Antoine street on which to build a large warehouse. —The plans of Saxe & Archibald, architects, have been accepted for the new Emmanuel Congregational church to be erected on Drummond street, near Sherbrooke. It will be built of grey brick with sandstone trimmings, cost about $80,000. Ground will be broken May 1st.—A large wholesale dry goods firm is said to have purchased the property immediately east of the premises of Greenshields, Limited, on Craig street, the intention being to build a large block.

OTTAWA, ONT.—The Waterworks Committee have decided to make application to the Legislature for authority to raise by debentures $100,000 for waterworks construction and extension.—Ald. Pepper, Chairman Waterworks Committee, will receive tenders until Feb. 27th for supply of castings, brasswork, piping, etc., for the current year.—James Davidson, Chairman Board of Works, will receive tenders up to Feb. 28 for annual supply of broken stone, curbing, plank and cedar, brick, hardware, sand, tile pipe and Portland cement.—Bishop Horner intends building an addition to the College of the Holiness Movement, Bank street.—J. K. Paisley, proprietor of the Grand Union Hotel, has concluded the purchase of property on Elgin street, between Waverley and Frank streets, and has in view the erection of a modern apartment building.

HAMILTON, ONT.—Klein & Binkley wish to secure a long lease of the site on James street, north of the City Hall, on which they propose to erect a six-storey office building. — A new stable will be built in connection with No. 3 police station.—Stewart & Witton, architects, have received instructions to prepare plans for the following buildings: A $5,000 brick house, Bay and Duke streets, for Dr. A. Woolverton; a $3,000 house on Farleigh avenue for A. Tallman; three houses, corner Wellington and Evans streets, for Joseph Farmer. Same architects are preparing plans for an extensive remodelling of St. Andrews' church, and have also been instructed by Finch Bros. to make alterations at Nos. 29 and 31 West King street, to cost about $10,000.—The plans for the proposed terminal station show a four-storey building with wide frontage on King street. The estimated cost is $250,000.

WINNIPEG, MAN.—The Western Bag Company, Limited, capital $750,000, have purchased a site on Alexander and Pacific avenues on which they purpose building a four storey factory.—Darling & Pearson, architects, are asking for tenders by the 26th inst. for erection of a brick house on Wellington Crescent for S. W. Ellis.—The Whytewold Club are considering the building of a club house. W. L. Parish is president.—Tenders are invited by Frank Lee, Division Engineer C.P.R., up to Saturday, March 10th, for

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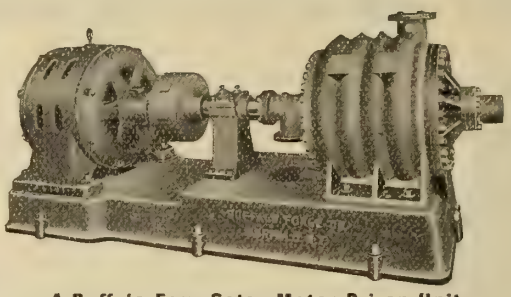

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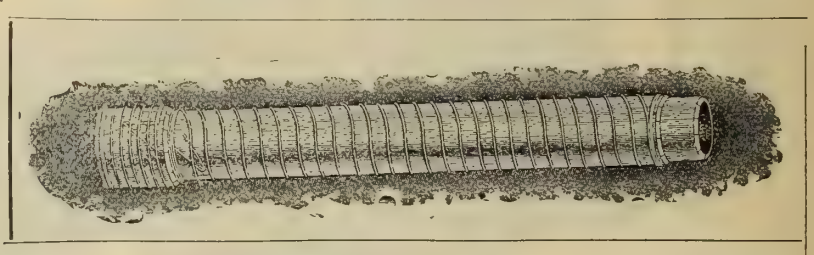

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VANCOUVER, B. C.—Plans for the market buildings have been submitted by the City Engineer. These provide for a wharf to cost $28,000, and buildings to cost $20,900.—Crowe & Wilson will build a large brick block on Hastings street, between Westminster and Columbia avenues, to cost $20,000.—The people of South Vancouver, at a recent meeting, decided to build a new school during the coming summer. — Plans for the new theatre, corner of Hastings street east and Gore avenue, have been completed by Chas. K. Shand, architect. It will be three stories, 73 x 120 feet, approximate cost $40,000.—W. A. Clark, of this city, and F. S. DeGrey, New Westminster, have had plans prepared for a three storey store and office building on Hastings street, to be of brick and stone, cost about $35,000.—M. C. Griffith has taken out permits for the erection of a store and dwelling on Broughton street, to cost $5,000; also two dwellings on adjoining lots, to cost $3,000 each.—The Vancouver, Fraser Valley & Southern Railway Company will ask incorporation, to build from Vancouver to New Westminster and thence across the U. S. border. —J. A. Moore, of this city, is one of the prime movers in a scheme to build an electric railway between this city and Portland, Washington. Preliminary work on the right of way has already been commenced. — The new building to be erected by Vancouver Lodge No. 10, Independent Order of Oddfellows, will be located on corner Hamilton and Pender streets and will be two stories and basement, of stone and brick.

TORONTO, ONT. — The Warden King Company, Montreal, have purchased a site on Lombard street, east of the post-office, on which to erect new factory buildings, to cost about $45,000. —The Frank H. Freer Company, Philadelphia, have leased the old Wampole warehouse on Lombard street, which will

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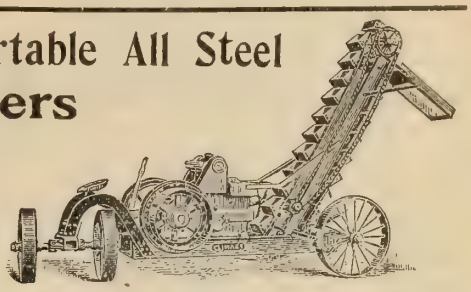

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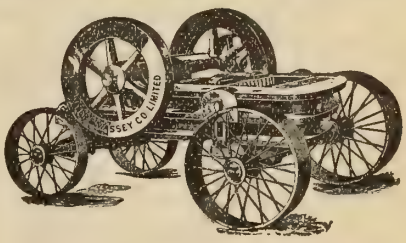

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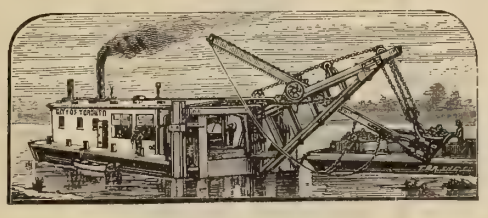

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be fitted up for their use.—Hyslop Bros., have bought a site, corner of Shuter and Victoria streets, on which to build an automobile factory.—City Engineer Rust has recommended the construction of a number of asphalt pavements. — The Bellevue House has recently been purchased from Dr. Temple for a church home for aged people. An extension to the building is contemplated.—The Sisters of St. John the Divine are interested in the scheme.—The following works are to be constructed: A 15-inch tile pipe sewer in Poplar Plains road, cost $6,500; macadam roadway on Ann street, cost $4,550: asphalt pavement on Richmond street between Church and Jarvis streets, cost $7,780; brick pavement on Wellington avenue, cost $2,196; asphalt pavement on Elliott street, cost $5,216; brick pavement on Lobb avenue, cost $2,125.—Plans for the disposal of Toronto's sewage have been approved of, the estimated cost of the work being $2,073,341. This will include a high level sewer, Dufferin street, to cost $731,541; low-level sewer along Front street and Eastern avenue to Woodbine with siphon under the Don, cost $257,100; septic tank, $344,700; force main, $120,000; pumping station, $355,000.—Finley & Spence, architects, Montreal, are preparing plans for the new Molsons Bank building to be erected on Bay street near King. It will be a two-story structure, 100 feet by 50 feet.—Tenders will be received until 23rd. inst. for the erection of two roughcast dwellings. Plans at 309 Lippincott street.—P. H. Finney, architect, Adelaide and Church streets, is asking for tenders for erection of a house on Howard street.—The Pines Hotel, Bloor and Dundas streets, has been purchased by A. L. Sparling. Extensive alterations are to be made in the building.—The office building at 160 Bay street has been sold to Charles Tilley, who intends building a wholesale warehouse in the rear.—A macadam pavement has been recommended by the City Engineer for Cottingham street, eastward from Avenue road, to cost $2,802.—A bitulithic pavement will be constructed on Gibson avenue, from Yonge street to west end, cost $2,752. — A new asphalt pavement has been recommended for Queen street, between Niagara street and Roncesvalles avenue, to cost $66,332.—Building permits have been granted as follows: Hugh Blain, 2 story stone and brick dwelling, Schiller avenue, cost $3,000; Ansman & Marshall, 2½-story brick and frame dwelling, Yorkville avenue, near Avenue road, cost $3,000; Mrs. I. Wilson, 2½-story brick dwelling, 17 Emerson avenue, cost $3,200; W. C. McQuillan, 2-story and basement stone and brick dwelling, Dearborn avenue, cost $3,200; J. & N. B. Graudin, pair 2-story and attic stone, brick and slate dwellings, Grace street, near Evans avenue, cost $5,000; M. Langmuir, 2-story and attic brick dwelling, Schiller avenue, cost $5,000; J. Taylor, pair 2½-storey frame and roughcast dwellings, Austin avenue, near Pape, cost $3,000; Mrs. L. E. Miller, 2-storey brick dwelling, 162 Howland avenue, cost $2,000; The Wm. Davies Co., one-storey brick store, 230 Queen street west, cost $3,900; S. C. Stanley-Clark, 21/2 story brick and Roman stone dwelling, corner Bernard avenue and Huron street, cost $7,000; John McLeod, pair 2 1/2-storey brick and stone dwellings, Howland and Albany avenues, cost $6,000; Mrs. Husband, 2-storey and attic brick and stone dwelling, Beatty avenue, near Queen street, cost $4,000; C. E. Boyd, 21/2-storey brick dwelling, Bathurst street, near Ulster, cost $5,000; William Gordon, 21/2-storey stone and brick dwelling, Binscarth avenue, near Glen road, cost $4,300; Mrs. Ewing, 2-storey

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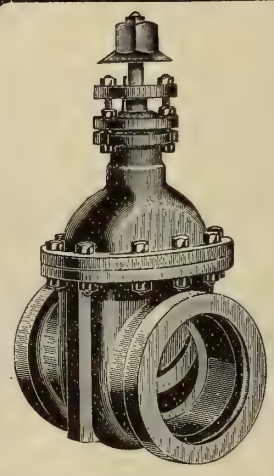

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brick dwelling, Landowne avenue, near Lappin, cost $3,000; G. Sanderson, 2-storey brick dwelling and shop, Palmerston avenue, near Barton, cost $3,000; G. H. Weale, 2-storey brick dwelling, Radcliffe avenue, near Queen street, cost $2,400.—M. J. Haney is negotiating to secure the site west of Cherry street and north of Keating's Channel, to use for storage and for the manufacture of structural steel work for bridges and buildings.—It is proposed to lease the three acres east of the Haney site to a company who will manufacture lubricating oils.—Chas. F. Wagner, architect, 28 Toronto street, will receive tenders until 24th inst. for various trades in erection of four brick houses on Clinton street.—The Kew Beach Presbyterians contemplate the erection of a new church on Minerva avenue, at an estimated cost of $15,000.—The Bank of British North America is having plans prepared for the erection of a brick building for bank purposes at the corner of Dufferin and King streets.—It is rumored that Mackenzie & Mann are desirous of obtaining a site on Ashbridge's Marsh, on which they would establish extensive car works.—A Deaconess home and training school will soon be built on the Metropolitan square, corner Church and Shuter streets, to cost $100,000.—The Bachrack Company have leased the new warehouse of Geo. Hees & Son on Bay street, near Wellington, to which they purpose adding another story.

CONTRACTS AWARDED.

MAISONNEUVE, QUE. — The contract for building new fire station has been let to Alphonse Gratton, at $25,075.

PEMBROKE, ONT. — The Canadian Westinghouse Company have secured the contract for installation of electric plant at Black River near Pembroke.

PORT BURWELL, ONT.—The Pacific Construction Company, of Ottawa, have secured the contract to build the new breakwater here, to cost $70,000.

ESQUIMALT, B. C.—Messrs. Bullen, of the B.C. Marine Railway, have received the contract for repairs on the British bark Bermuda, to cost about $25,000.

PETERBORO, ONT.—Abel Hendren, Lakefield, has secured the contract to build a 2-storey frame residence on Jacob's Island, in Pigeon Lake, for Mrs. F. A. Bates, of New York, to cost $7,000.

OTTAWA, ONT.—The Ottawa Electric Railway Company have accepted the following tenders for new boat house at Britannia-on-the-Bay: Carpentry, J. J. Wallace; structural steel, Dominion Bridge Company; painting, Ritchie & Nunn; plumbing, Blyth & Watt.

ST. HENRY, QUE. — Archibald F. Byers, B.Sc., 18 St. Alexis street, Montreal, has secured the contract for the construction of a large concrete tank, to hold the furnaces and chimneys of the new mill plant of the Montreal Rolling Mills Company.

POINT ST. CHARLES, QUE.—The following tenders have been accepted by the Catholic School Board for erection of annex to Sarsfield school, estimated cost $13,000: Woodwork, Brouillette & Lessard, $6,500; plumbing, heating and ventilation, A. Belanger, $4,275; plastering, Jos. Chamberland, $1,030; painting and glazing, D. Lamontague, $864; tiling and marble work, T. Rocon & Son, $1,254.

TORONTO, ONT. — Westinghouse, Church, Kerr & Company, New York, are reported to have been awarded the contract for the erection of the new Union station. Ross & McFarlane, Montreal, and Carrere & Hastings, New York, are joint architects. — St. Peter's Church, Bloor street: Brick and masonry, Wm. Kean; carpenter work, Hogg & Company; plastering, H. R. Beaver; painting, Jones & Ottaway; roofing, A. Ryan; iron columns, McGregor & McIntyre.

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							Neat.					3 (Sand) to 1 (Cement)				
					Initial	Final	1 dy.	7 dys.	28 dys	3 mos	1 yr.	1 dy.	7 dys.	28 dys.	3 mos.	1 yr.
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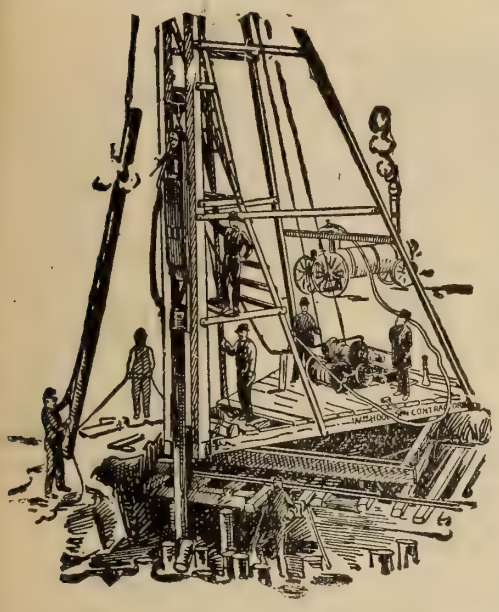

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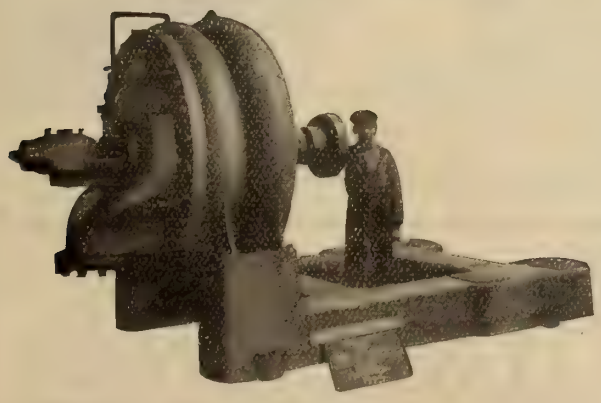

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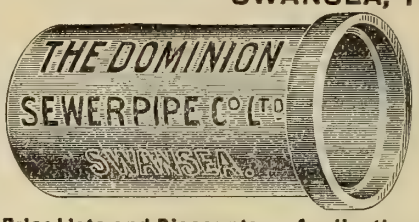

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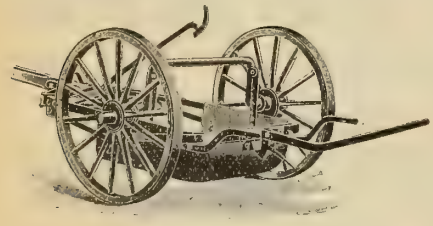
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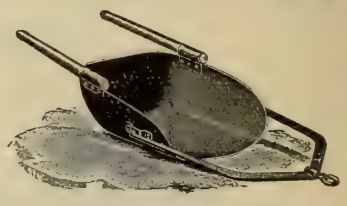

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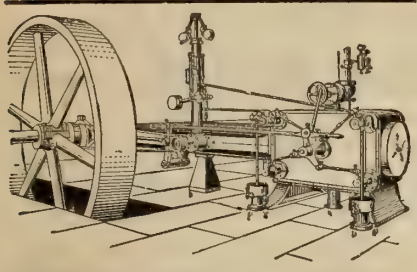

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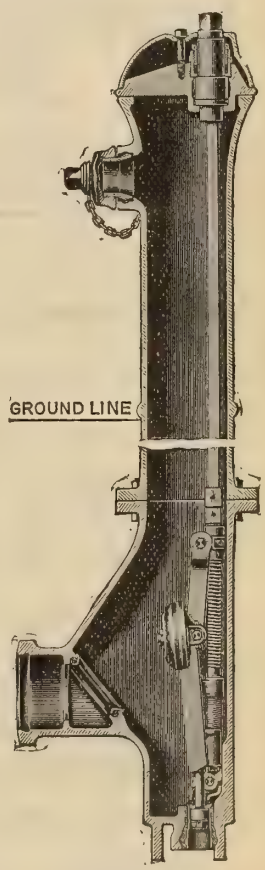

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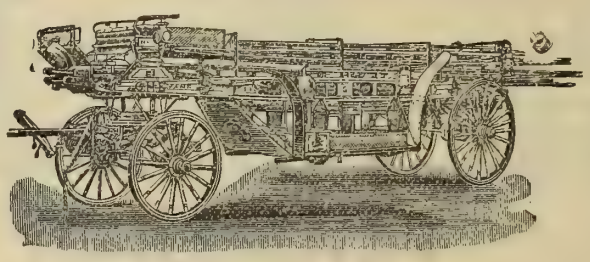

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Long Distance Phones 686 and 684 **W. E. SEAGRAVE,** WALKERVILLE ONT.

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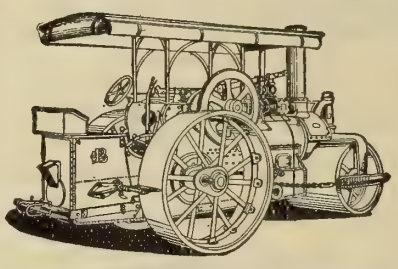
ROAD MACHINERY AND FIRE APPARATUS



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We Rebuild other makes of Fire Engines with our patent Boiler.

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IN THREE SIZES—10, 12 and 15 ton.
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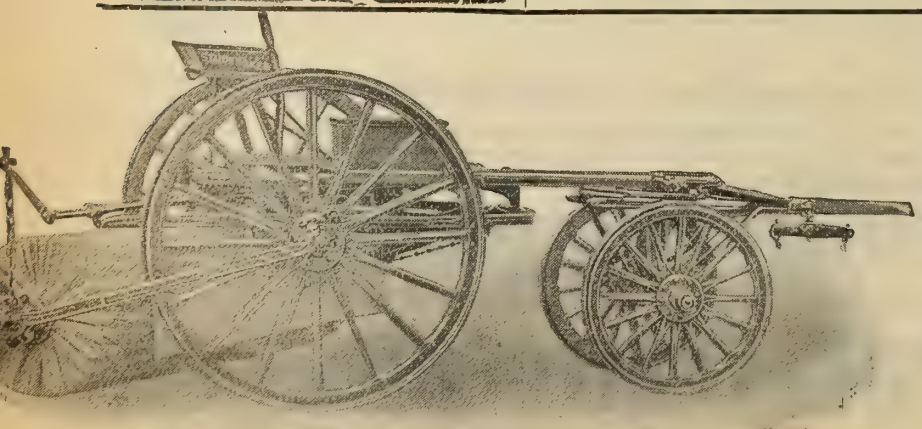

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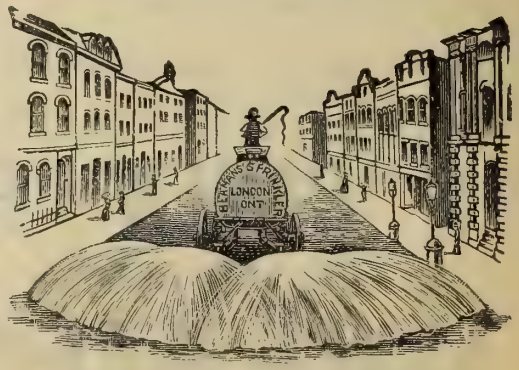
Because no sweeper so effectually does the work for which it is designed as "The Studebaker." It Sweeps Clean. No sweeper is constructed with the same degree of care and mechanical precision. It Wears Well. "The Studebaker" has the smallest number of working parts, and has less gearing than any other sweeper made: It is free from all unnecessary complications. With reasonable care it does not get out of order. Send for comp ete descriptive catalogue.



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Does not clog or get out of order. Greatest width of spray Can be graded from driver's seat to any volume.

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Contractors instead of asking friends to go on their bonds should have a company act as surety for them.

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The Lehigh Company are now erecting a plant at Belleville, Ontario, of 4,000 barrels per day capacity. For prices, etc., address—

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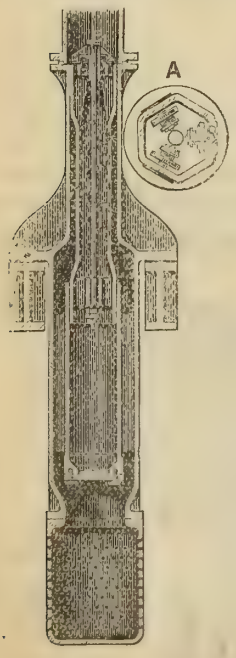

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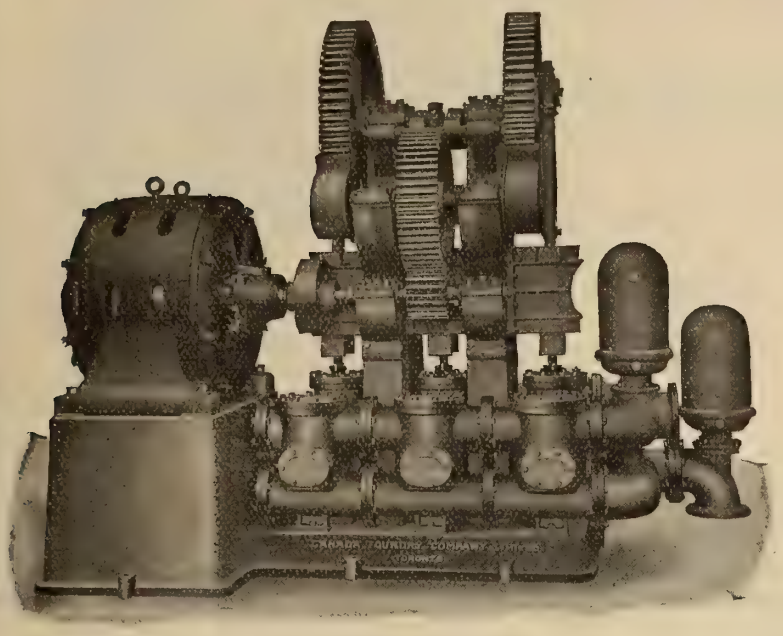

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A full line of waterworks' supplies carried in stock.

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Simple in Operation

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CANADIAN

Contract Record

A Weekly Journal of Public Works, Tenders, Advance Information and Municipal Progress

This Paper Reaches Every Week the Town and City Clerks, Town and City Engineers, County Clerks and County Engineers, Purchasers of Municipal Debentures and Leading Contractors in All Lines Throughout Canada

VOL. 16. TORONTO, MONTREAL — FEBRUARY 28, 1906 — WINNIPEG, VANCOUVER No. 52

THE CANADIAN CONTRACT RECORD
PUBLISHED EVERY WEDNESDAY
As an Intermediate Edition of the Canadian Architect and Builder.

THE C. H. MORTIMER PUBLISHING COMPANY
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City Engineer

Applications will be received by the undersigned for the position of City Engineer of the City of Stratford up to SATURDAY, MARCH 10TH. Applications will state experience and qualifications, and salary expected giving the City their whole time, and salary expected being allowed to do outside work.

S. J. MALLION,
Chairman Board of Works,
Stratford, Ont.

Tenders for Steel Bridge

Tenders will be received up to FRIDAY, MARCH 9TH, for the erection of a new Steel Bridge over the River Speed in Guelph Township known as "Carrahers Bridge". Length between abutments 70 feet, 12 foot roadway clear of wheel guards, 10 feet above water. Contractors to submit their own plans and specifications with tender, stating time of completion, and with a ten per cent. deposit for satisfactory completion.

JAMES LAIDLAW,
Clerk Guelph Township,
Box 1018, Guelph, Ont.

CANADIAN PACIFIC RAILWAY

Tenders covering the work required in connection with Track-Laying, Bridging and Ballasting on the Sudbury branch between Romford and French River Crossing (40 miles) will be received by the undersigned up to noon on SATURDAY, MARCH 10TH, 1906.

Plans and specifications can be seen at the office of the Division Engineer of Construction, 112-118 King Street West, Toronto.

J. W. LEONARD,
Manager of Construction.

Tenders Wanted

Sealed tenders, addressed to John Morrison, City Clerk, Woodstock, Ont., will be received up to 7 p.m. of FRIDAY, THE 9TH DAY OF MARCH, 1906, for the construction of cement concrete sidewalks for the City of Woodstock, during the season of 1906.

Specifications may be seen at the office of the undersigned.

The lowest or any tender not necessarily accepted.

F. J. URE,
City Engineer.

CITY OF BRANDON

Tenders for Cement

Sealed tenders, addressed to "The Chairman of the Board of Works, Brandon, Man.", and endorsed "Tender for Cement", will be received by the undersigned until 6 o'clock p.m. on THURSDAY, APRIL 12TH, 1906, for supplying from 5,000 to 7000 bbls. Portland cement. Specifications and form of tender may be obtained on application to W. H. Shillinglaw, City Engineer, Brandon, Man.

The City Council does not bind itself to accept the lowest or any tender.

GEO. F. SYKES,
Sec'y Treas.

Brandon, February 15th, 1906.

Tenders For Buildings

Sealed proposals will be received at the Division Engineer's Office, Winnipeg until eighteen (18) K SATURDAY, MARCH 10TH, 1906, by the Canadian Pacific Railway Co., for the construction of all or any of the following buildings:

No. 2 Section Houses on Stone Foundation

Broadview Section—Chater, Hargrave, Burrows, Percival.
Moose Mountain Section—Tyvan.

Combination Section House and Telegraph Office

Ignace Section—Raleigh.
Kenora Section—Culver.
Brandon Section—Meadows.

No. 5 Stations

Estevan Section—Frobisher. Glen Ewen.

No. 5 Station and Freight Shed

Swift Current Section—Mortlach, Herbert, Chaplin.
Portal Section—Lang.
Moose Mountain Section—Stoughton.

No. 2 Portable Depots, f.o.b., Nearest Shipping Point

Swift Current Section—Morse.
Moose Mountain Section—Lajord.

The right is reserved to reject any or all proposals, to award the contract to other than the lowest bidder, or to readvertise for proposals should the Company deem such a course advantageous to its interests.

Plans, specifications, form of proposal can be seen at the Division Engineer's Office, Winnipeg; Superintendent's Office, Fort William; Superintendent's Office, Brandon; Superintendent's Office, Moose Jaw.

Envelopes containing proposals should be marked "Proposals for Buildings."

FRANK LEE,
Division Engineer,
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A first-class General Manager for a supply house; one speaking English and French fluently and with good all round knowledge of builders' and founders' requirements.

Excellent prospect for a man of ability to secure an interest in a live going concern with connections in Quebec, Ontario, North West and Maritime Provinces. Apply with references to

P. O. DRAWER 2330,
Montreal.

Debentures for Sale

Sealed tenders will be received by the undersigned up till 6 o'clock p.m., THURSDAY, THE 22ND DAY OF MARCH, 1906, for Town of Renfrew Twenty and Thirty Year Debentures amounting to $44,640.10 (this amount includes interest to end of term).

For full particulars write the undersigned.

JAS. K. ROCHESTER,
Town Clerk,
Renfrew, Ont.

Tenders

will be received by the undersigned up to noon of WEDNESDAY, MARCH 7TH, for excavating the site of the proposed

NATIONAL CLUB BUILDING

Bay street. Full particulars may be had at the office of

CURRY, SPROATT & ROLPH,
90 Yonge Street, Toronto.

Tenders Wanted

Tenders will be received by the undersigned up to noon of MONDAY, MARCH 12TH, 1906, for furnishing material and constructing Two Steel Highway Bridges in the Township of East Zorra. One of 70 ft. span, truss, and one of 30 ft., beam. Both to have concrete floors of 14 ft. clear width on expanded metal. Also abutments for same of either quarry stone or cement concrete. Price for abutments to include all excavation.

State price per cubic yard for abutments and per lineal feet for superstructures.

Contractors to furnish plans and short specifications.

The lowest or any tender not necessarily accepted.

Address,

JAMES ANDERSON,
Clerk East Zorra,
Hickson P. O., Ont.

TENDERS FOR PORTLAND CEMENT

Sealed tenders, marked "Tenders for Cement," will be received at the office of the undersigned up to 2 o'clock p.m. of the

8th Day of March next

for 5,000 barrels more or less of Portland Cement of 350 pounds net weight in sacks, to be delivered in car load lots f.o.b. Kingston.

Specifications and forms of tenders may be obtained on application, and the former may be seen at the office of th CANADIAN CONTRACT RECORD.

No tender will be received after the above mentioned time and date, and no tender will be considered unless accompanied with a certified cheque as per specifications.

The lowest or any tender not necessarily accepted.

H. B. R. CRAIG,
City Engineer,
Kingston, Ont.

[FOR ADDITIONAL ADVERTISEMENTS FOR TENDERS SEE NEXT PAGE.]

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Good all round Architectural Draughtsman, prospective and color work not necessary. Write at once, stating experience, ability and salary required.

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Helena, Mont., U.S.A.

Tenders for Arches and Culverts and Abutments

Sealed proposals will be received at the Division Engineer's office, Winnipeg, until 18 (eighteen) K WEDNESDAY, MARCH 14TH, 1906, by the Canadian Pacific Railway Company, for the construction of all or any of the following arches, culverts and abutments.

Fort William Section

Bridge 338—Mileage 101.11; concrete or masonry abutments for 50 ft. span; double track.
Bridge 364—Mileage 88.73; concrete or masonry abutments for 30 ft. span; double track.
Bridge 404—Mileage 57.23; 7 ft. concrete rail culvert; double track.
Bridge 466—Mileage 26.79; 8 ft. concrete rail culvert; double track.

Ignace Section

Bridge 211—Mileage 70.1; 10 ft. concrete rail culvert; double track
Bridge 213—Mileage 69 0; 7 ft. concrete rail culvert; double track.
Bridge 214—Mileage 68.7; 7 ft. concrete rail culvert; double track.
Bridge 233—Mileage 52.05; concrete or masonry abutments for 20 ft. span; double track.

Kenora Section

Bridge 38—Mileage 73.9; 10 ft. concrete rail culvert; double track.
Bridge 42—Mileage 66 7; concrete or masonry abutments for 20 ft span; double track.
Bridge 55—Mileage 51.5; concrete on masonry abutments for 20 ft. span; double track.
Bridge 66—Mileage 40.1; 8 ft concrete arch; approximate length 30 ft.; double track.

Brandon Section

Bridge 16.0—4 ft. rail concrete culvert.
Bridge 37.45—4 ft. rail concrete culvert.
Bridge 41.19—4 ft. rail concrete culvert.
Bridge 41.58—4 ft. rail concrete culvert.
Bridge 44.7—5 ft. concrete arch; approximate length 20 ft.
Bridge 65.2—14 ft. concrete arch; approximate length 58 ft.
Bridge 99.9—14 ft. concrete arch; approximate length 94 ft.
Bridge 100.1—14 ft. concrete arch; approximate length 30 ft.
Bridge 129.2—Concrete abutment for 50 ft. span.

La Riviere Section

Bridge 54.3—4 ft. rail concrete culvert.
Bridge 55.2—4 ft. rail concrete culvert.

Broadview Section

Bridge 69.12—Concrete abutment for 30 ft. span.

Estevan Section

Bridge 88.2—Concrete abutment for 18 ft. span.
Bridge 108.5—10 ft. rail top for 18 ft. span.
Bridge 112.2—10 ft. rail top for 18 ft. span.
Bridge 116.8—4 ft. concrete arch.

Moose Jaw Section

Bridge 12.2—Concrete abutment for 17 ft. span.
Bridge 12.5—Concrete abutment for 17 ft. span.

Swift Current Section

Bridge 96.4—20 ft. concrete arch; approximate length 110 ft.
Bridge 101.3—20 ft. concrete arch; approximate length 110 ft.
Bridge 106.3—10 ft. rail concrete culvert.

Portal Section

Bridge 106.—5 ft. rail concrete culvert.
Bridge 153—8 ft. rail concrete culvert.
Bridge 12.5—Concrete abutments for 30 ft. span.

The company will furnish rails cut to correct lengths f.o.b. at the work.

The right is reserved to reject any or all proposals, to award the contract to other than the lowest bidder, or to readvertise for proposals should the company deem such a course advantageous to its interests.

Plans, specifications and form of proposal can be seen at the Division Engineer's office, Winnipeg; Superintendent's office, Fort William; Superintendent's office, Brandon; Superintendent's office, Moose Jaw.

Envelopes containing proposals should be marked "Proposals for Arches and Culverts."

FRANK LEE,
Division Engineer,
Winnipeg, Man.

SEWERS

Sealed proposals will be received up to the 15TH DAY OF MARCH, 1906, for the construction and supplying of material of about 1½ miles of Pipe Drains in the Town of Saskatoon, Saskatchewan. They are to be addressed to A. Turner, Esq., Sec.-Treasurer, and marked "Tender for Sewers."

Specifications, plans, etc., may be seen at the office of the Sec.-Treasurer or at the office of T. H. Wiggins, Engineer, after the 1st day of March, 1906. Tenders must be accompanied by a marked check on a chartered bank for 10 per cent. of the amount of the tender. No tender necessarily accepted.

A. TURNER,
Secretary-Treasurer.

CONTRACTS OPEN.

WEYBURN, ONT.—A 40,000 bushel elevator will be built here.

CALGARY, ALTA. — Rochon Bros. will build a factory 75 × 35 feet.

BEAVERTON, ONT. — H. Logan intends erecting a new residence.

BEAVER LAKE, ALTA. — A new school house is to be erected here soon.

BANFF, ALTA.—The C. P. R. will double the size of their hotel here this season.

BROUGHTON, N. S.—A large hall is to be built here for the Presbyterian church.

AYLMER, ONT.—The factory of the Aylmer Cigar Company is soon to be enlarged.

PICTON, ONT.—The Baptists purpose building a new church on Market street.

CARON, SASK. — A new Presbyterian church is to be built here to cost $3,000.

WELLAND, ONT.—Plans are being discussed for the establishment of a hospital here.

SHELBURNE, ONT. — F. E. Cole will build a new residence on Main street this summer.

TRURO, N. S.—D. A. Vaughan, of St. Stephen, N. B., will establish a paper box factory here.

LIVERPOOL, N.S. — New bridges are to be built at Liverpool and Jordan River this season.

ANDOVER, N.B.—The C.P.R. intend to rebuild the bridge here, at estimated cost of $60,000.

EDRANS, MAN.—The members of the Church of England have decided to build a new church here.

ERAMOSA, ONT. — James Oakes will receive tenders up to March 9th for erection of a new school.

GUELPH, ONT.—Taylor Bros. purpose erecting nine houses, either of brick or cement, on Elora street.

ELORA, ONT.—W. Powers is preparing to build a residence on the lot adjoining his present residence.

NELSON, B.C. — The C.P.R. will make improvements on the Kootenay division to cost about $500,000.

LANGHAM, SASK.—A. J. Derksan is about to invite tenders for a 30 ft. addition to the Central Hotel.

SELKIRK, MAN. — A new public school will be built from plans prepared by William Fingland, of Winnipeg.

ST. HENRI, QUE.—O. Decarie has secured a permit to construct three houses on Notre Dame street, to cost $3,000.

STE. CUNEGONDE, QUE.—Itzwere & Sarrasin have secured a permit to erect a large sawmill here, to cost $13,000.

STRATFORD, ONT.—James Wilson intends erecting a large three-storey building, corner Downie and St. Patrick streets.

CARMAN, MAN.—The members of the Methodist church are considering plans for the erection of a new building

ESSEX, ONT.—The Laing-Ritchie Company will soon erect a new building on the present site of the Imperial Bank

PORT CARLING, ONT. — The G.T.R. have decided to construct a branch line from Falkenburg to Port Carling.

FINGAL, ONT.—N. R. Darrach, architect, St. Thomas, is preparing plans for a new Presbyterian church to be built here.

WINDSOR, N. S.—The Bank of Nova Scotia have purchased a site on Water street on which they will erect a fine bank building.

INVERNESS, N.S.—Tenders will be received up to March 8th by A. L. Macdonald for the building of a new church here.

MEAFORD, ONT.—J. L. Cornwell, Mr. King and Wm. Kerr, Bayview, will build residences near the High School this spring.

MORRISBURG, ONT.—It is probable that the old bridge at Winchester Springs will soon be replaced by an iron structure.

HAMILTON, ONT.— Subscriptions are being taken by the members of the Gospel Tabernacle for the erection of a new church.

PENETANGUISHENE, ONT. — Simcoe County Council have decided to assist in the establishment of a High School here.

SOURIS, MAN.—W. McCulloch intends building an addition to his brick block on corner of Sixth avenue and First street.

HESPELER, ONT.—The congregation of the Methodist church have decided to enlarge and extensively repair their church.

BOISSEVAIN, MAN.—F. L. Schaffuer will receive tenders up to March 16th for the erection of a brick school house here.

MOOSE JAW, SASK.—Tenders will be received by H. Jagger, up to March 31st, for the erection of a school building on South Hill.

GLACE BAY, N.S.—A modern roundhouse will be erected here in connection with the Dominion Coal Company's railway system.

DOUGLAS, ONT.—The work of constructing a flour and feed mill will be begun in the spring. The motive power will be electricity.

WEST LORNE, ONT.—It is understood that a plant for manufacture of concrete blocks and tile will be established here this spring.

WINGHAM, ONT.—A High School building will be built here during the summer. Dr. A. J. Irwin is Chairman of of Board of Trustees.

DURHAM, ONT.—John H. Brown will receive tenders until March 10th for the erection of a caretaker's residence on the cemetery property.

PORT HOPE, ONT.—G. W. Jones, of Newtonville, is endeavoring to have a local telephone line established in Hope and Clarke Townships.

TRALEE, ONT.—Tenders will be received by Martin Linzeman, up to March 10th, for cement basement and brick veneering of school house.

NEEPAWA, MAN.—Tenders will be received by J. J. Hamilton, president of the Board, up to March 5th, for erection of a new wing to the hospital.

EAST TORONTO, ONT.—The congregation of St. Matthews' church are taking steps towards the erection of a new brick edifice on Cummings street.

WELLAND, ONT.—The Robertson Machinery Company have purchased a site on Lincoln street on which they will erect buildings suitable for their business.

PEMBROKE, ONT.—Surveyors are at work in Westmeath Township on a

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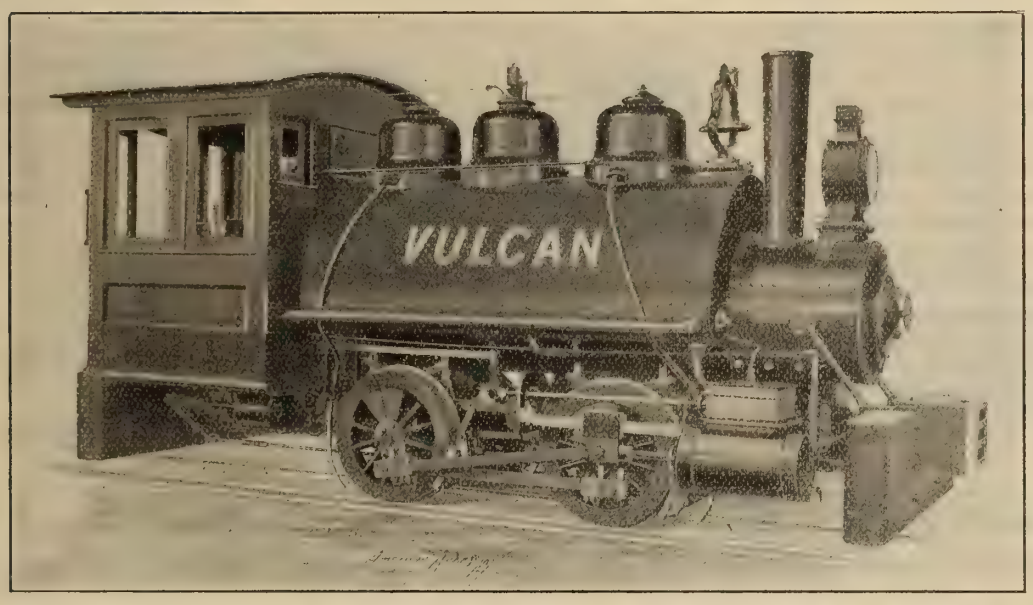

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SPECIFICATIONS AND CATALOGUES ON APPLICATION

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route for a proposed electric railway to connect this town with Petawawa and other points.

BELLEVILLE, ONT.—Front street will be paved with asphalt this summer at a cost of $20,000, and a filtering system will be installed at Zewick's Island to cost $10,000.

KENORA, ONT.—Estimates are being made on the erection of an elevator of 500,000 bushels capacity and a large mill. H. S. Dowd and D. C. Cameron are interested.

BRACEBRIDGF, ONT.—The Council have decided to draw the attention of the Ontario Cabinet to the advisibility of having a House of Refuge established in this locality.

ST. JOHN, N.B.—The C.P.R. are preparing to build five concrete piers to carry their bridge across the St. John river. They also propose building a large freight shed here.

WOODSTOCK, ONT.—John Morrison, City Clerk, will receive tenders up to March 9th for the construction of cement concrete sidewalks. Plans at office of F. J. Ure, City Engineer.

PARRY SOUND, ONT.—A new curling and skating rink is to be erected here next summer, to cost $3,500.—C. Gillespie is preparing to build a residence opposite the West Ward school.

PETERBORO, ONT.—The Council will be asked for $30,000 to build a new school in south part of city.—The American Cereal Company will build a large wholesale warehouse here this spring.

RENFREW, ONT. — The Renfrew Power Company propose to install a new pipe line, stand pipe, water wheels and generators. J. E. H. Barnet, managing director; McDougall & McRae, Ottawa, engineers.

MIDALE, SASK.—Plans are being made for the erection of a fine hotel here.—O. Wedin has plans out for a new store.—Fluyr & Krough will build a double dwelling.—A new house will be built by Dr. Scott.

LEAMINGTON, ONT.—Mr. Kuhlman will build an elevator on Pelee Island if assistance can be secured from the Government.—Dr. Jenner and Arthur Brown will build residences here this season.

MAHONE BAY, N.S.—It is proposed to install a waterworks system here and operate the electric plant under municipal control. L. J. Dewar, of Lunenburg, has been appointed as consulting engineer.

ST. MARYS, ONT. — Mr. Kelehon, of Hensall, is desirous of establishing an engine works here at an estimated cost of $15,000.—The Town Council have decided to introduce a by-law to raise $5,000 for street improvements.

QU'APPELLE, SASK.—Tenders will be received by J. C. Starr, up to March 10th, for the completion of the superstructure of the town hall, according to plans of Dodd & Hopkins, architects, Regina, Sask.

LONDON, ONT.—It is expected that the Grand Trunk Railway will this week submit to the City Council plans of proposed improvements here.—The Crown and the Sterling Banks are looking for sites here on which to establish branches.

SASKATOON, SASK.— A. Bowerman intends erecting a two-storey bank and office building, corner Second avenue and 22nd street. It is rumored that the Great Northern Railway desire extending their line to this town.

KINGSTON, ONT.—A project for the erection of a modern summer hotel here is being considered by prominent citizens.—H. B. R. Craig, City Engineer,

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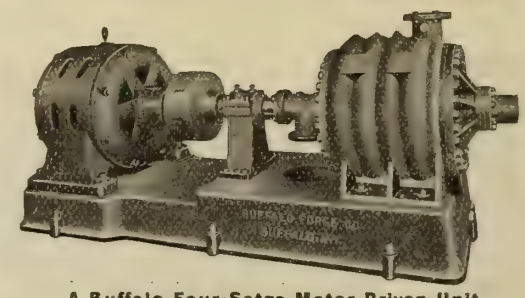

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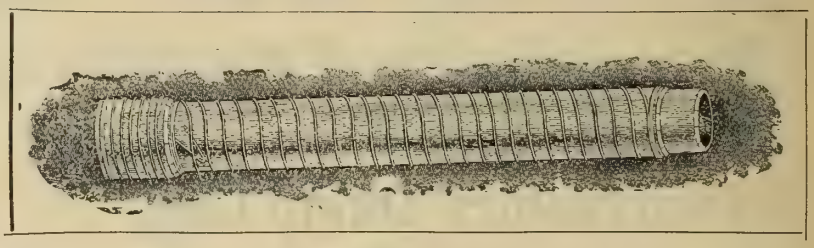

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has asked for tenders for supply of lumber, sewer-pipe, etc., for city works.

RED DEER, ALTA.—The Alberta Northern Railway & Coal Company is applying for incorporation to build a railway from Lethbridge to Edmonton.—A new Methodist church will be built here the coming summer, at estimated cost of $20,000.

GALT, ONT.—The Board of Directors of the Galt, Preston & Hespeler Street Railway Company have decided to add 60 horse-power to present freight locomotive and to purchase another locomotive and a new passenger car.

HALF ISLAND COVE, N. S.—Tenders are asked by F. Gelinas, Secretary Department of Public Works, Ottawa, until March 13th, for the construction of a breakwater here. Plans at office of C. E. W. Dodwell, Halifax, E. G. Millidge, Antigonish, and at above Department.

NEWMARKET, ONT.—An effort is being made by the citizens to have the Pickering College building erected here. —The surveying for the Lake Simcoe canal is nearly completed and tenders for its construction will soon be invited.

HALIFAX, N. S. — The Board of Trade passed a resolution requesting the Government to grant a bonus to aid in establishing steel ship-building here.—The erection of a sanitarium on Sable Island is being discussed here by medical men.

BRANTFORD, ONT.—It is understood that the building now occupied by Henry Hall on Queen street will be replaced by two large stores.—J. A. Smith, Township Clerk, will receive tenders until March 3rd for supply of cement, lumber, etc.

REGINA, SASK.—Plans have been prepared by W. W. LaChance, architect, for a hotel to be erected on South Railway street to cost $40,000. — Frank Evans, architect, Winnipeg, is preparing plans for an extensive enlargement of the Alexandra Hotel on Hamilton street.

PORT ARTHUR, ONT.—An agreement has been made with certain Boston capitalists, who will erect extensive tube works to cost about $750,000.—James McTeigue will receive tenders up to March 2nd for erection of a brick and stone fire station.

QUEBEC, QUE.—The North Shore Power, Railway & Navigation Company will shortly be in the market for eight 100 k.w. generators for their pulp mill at Seven Islands.—The Bank of Montreal have purchased the old St. Lawrence Chambers at corner of James and Peter streets and will replace the present building with a modern seven-storey structure.

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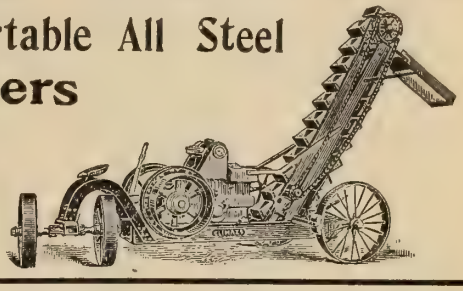

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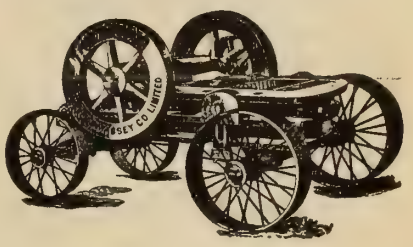

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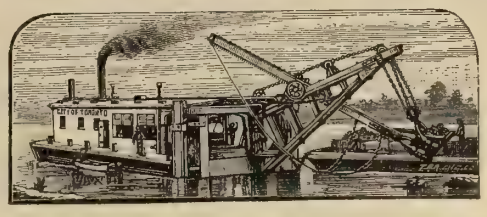

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PRINCE ALBERT, SASK. — Mrs. Stuart will build a residence on a site on the hill.

FORT WILLIAM, ONT.—A large freight shed is to be built here this summer for the C.P.R.

MANITOU, MAN.—The Independent Order of Foresters have decided to build a new opera house here this spring, to cost about $6,000.

CHICOUTIMI, QUE.—The Chicoutimi Pulp Company are constructing a large dam on the Aux Sables river. McDougall & McRae, Ottawa, and John F. Guay, Quebec, engineers.

LAKEFIELD, ONT. — The Council contemplate purchasing the plant of the Lakefield Light & Power Company, and will ask for $2,500 for improvements.—The County Council have decided to purchase the Preston property here as a site for new House of Refuge; estimated cost of building, $30,000.

NIAGARA FALLS, ONT.—A Canadian branch of the Ramapo Iron Works is to be established here to manufacture railway supplies. J. W. Nesbitt, K. C., John G. Gould, and others, of Hamilton, are interested.—The International Railway is making preparations to build temporary car sheds on the site of the old ones, recently burned.

BRANDON, MAN. — The Brandon Electric Light Company purpose increasing their power plant and will erect a new brick station.—The C.P.R. have recently granted sites on their tracks here and four warehouses will soon be built thereon.—C. B. McAllister, of the Great Western Power & Manufacturing Company, Peterboro, has been in town with the view of establishing a large gas and electric power plant here.

TORONTO JUNCTION, ONT. — J. H. Drummer has decided to build several small houses in the west end of the town. — The Gunn Bros. Abattoir Company are making arrangements to build thirty houses for workmen near their works.—Others who will engage extensively in building operations are John Marr, T. J. Fleming & Sons, Thomas Wright, D. Kaiser, and John Keys.

VICTORIA, B. C.—Plans are being prepared for the reconstruction of the interior of the Savoy Theatre on Government street.—It is proposed to construct a tank to drain the district between St. Lawrence street and the outer wharf, estimated cost $18,000.—The Government of British Columbia invite architects to submit competitive designs by March 10th for a court house at Vancouver to cost $150,000. For first prize $350 will be given, and for second prize $250.

EDMONTON, ALTA. — The Bank of Hamilton are negotiating for the purchase of a site on which to erect a bank. —The Molsons Bank purpose erecting a new building.—Arthur Congden will build two stores on Third street to cost $3,500.—Joseph Schuster has taken out a permit for a residence to cost $2,000. —At the regular meeting of the City Council on February 21st, the City Engineer submitted plans for extending the waterworks system three miles and the sewerage system over four miles, at an estimated cost of $115,000.

NEW WESTMINSTER, B.C. — A two-story brick and stone block will be built on the vacant lot, corner Columbia and Sixth streets, which was recently sold by Malins & Coulthard.—The Sumas Development Company are considering a scheme for the reclaiming of a large area of land on Sumas prairie. This would change the course of the Chilliwack river so that it would empty into the Fraser river at Miller's Landing instead of into Lake Sumas. — John Crean has purchased a lot on Columbia street, opposite Bank of Montreal, on which he purposes erecting a large hotel. —There is prospect of a boot and shoe manufacturing house being established in connection with the Fraser River Tannery.

OTTAWA, ONT.—The G. T. R. have secured an option on the Corry Block, which they will replace by a new station if a deal is made.—At a vestry meeting of St. Matthew's Church, it was decided to provide for a necessary extension to their building.—The trustees of Stewarton Presbyterian Church have accepted plans for their new building, which is to be of limestone and to cost about $27,500.—J. E. Brown, Superintendent of the Electrical Department, will receive tenders up to March 2nd for supply of meters, transformers, incandescent and arc lamps, wire, globes, etc., for the municipal plant. —An addition to the Creighton street school has been approved by the Board of Education.

MONTREAL, QUE. — The Grand Trunk Railway have purchased property opposite their main offices, on which it is said the offices of the Grand Trunk Pacific Railway will be built.—The Canadian Pacific Railway Company are negotiating for the purchase of the biscuit factory site of Viau Freres on Notre Dame street for the extension of their freight sheds.—Finley & Spence are the architects for extensive apartments to be erected at Pine avenue and Durocher street.—The Smart Bag Company have organized, with a capital of $1,000,000, and intend erecting a modern bag plant here. Lieut.-Col. C. A. Smart is interested.—The new offices of the Royal Bank, on St. James street, will be begun this spring. The front will be of white marble.

VANCOUVER, B. C. — Capitalists from Portland and New York are negotiating for the purchase of the site now occupied by the court house on which they would erect a large five or six storey stone hotel and theatre.—The Glasgow Hotel is to be remodelled into a six-storey solid brick building.—The Royal Bank of Canada intend soon to replace the Horner Block by a fine building.—It is understood that plans are being prepared for a magnificent Orange Hall, corner Gore avenue and Hastings street.—The Norris Safe and Lock Company, of Seattle, Wash, have decided to erect a five-storey block on Granville street.—Alexander Pantages, of Seattle, has in view the erection of a new theatre here.—T.J. Roberts is having plans prepared for an addition of fifty rooms to the Grand Hotel.

WINNIPEG, MAN.—J. H. Cadham, architect, has just taken tenders for erection of two additional stories to the McIntyre block.—Tenders will shortly be asked for the erection of a large business block on the north-east corner of Portage avenue and Donald street. — Hooper & Walker, architects, are this week taking tenders for a brick and stone warehouse for E. H. Briggs & Company and will receive tenders up to March 8th for erection of brick and stone residence for James Scott, Wellington crescent, Fort Rouge.—The Board of Directors of the Winnipeg General Hospital have decided to erect a nurses' home, plans for which have already been submitted. — Tenders are invited in this issue for the construction of a number of arches, culverts and abutments for the Canadian Pacific Railway.—TheShaarey-Shomyincongregation have decided to erect a temple on Dagmar street, at an estimated cost of $30,000. Dr. Friedlander is the head of the congregation.—S. Brown has purchased a site on River avenne, Fort Rouge, on which he will erect a large four-storey apartment block, of Edmonton pressed brick.—The Canadian Bay Company intend erecting a large factory in this city. —St. Joseph's Orphan Home Society will erect a new home in St. James, just west of the C.P.R. tracks, for which plans are now being prepared.

TORONTO, ONT.—F. S. Baker, architect, has prepared plans for Huylers' store and factory on Yonge street. Tenders will be invited immediately.—The Canadian Savings, Loan & Building Association have purchased 43 and 45 Adelaide street east, and will make alterations thereto.—F. T. Burgess has purchased the block of property at 600 Pape avenue and intends this season to erect houses on the Pape and Frizyell avenue frontages.—The City Engineer estimates that it will cost $90,000 for the erection of 2,400 feet of sea wall in front of the Exhibition Grounds and at a distance of 500 feet from the present shore line.—The plans of George W. Guinlock, architect, for the new Press Bureau and Horticultural Building, have been adopted by the Exhibition Board. The Press Bureau will be a two-storey structure 70 feet by 40 feet and the Horticultural Building will be in the form of a cross, 220 feet from end to end, cost $70,000.—New granolithic walks are to be laid in Allan Gardens, to cost $3,100—A site on the west end of Hanlan's Island has been secured on which to erect a church.—Tenders are wanted at 98 Brunswick avenue for erection of eight-roomed brick residence.—The enlargement of Osgoode Hall, which has been under consideration for some time, is likely to be commenced at an early date. F. R. Heakes, Provincial Architect, recently made a thorough examination of the building.—The Bell Telephone Company purpose building two new exchanges this year, one on Lee avenne, the other on corner of Oxford street and Bellevue avenue. — C. W. Postlethwaite, Harbormaster, will receive tenders up to March 5th for dredging required in the harbor.—The Toronto & York Railway Company will proceed at once with the construction of their road easterly from Scarboro Village to Whitby, and possibly to Oshawa. — The National Trust Company have sold sites on Beatrice street and Grace street, on both of which dwelling houses will be built this spring.—Building permits have been granted as follows: R. Crashley, 2 and 3-story addition to store and dwelling, 367 Queen street west, cost $5,000; J. S. Montgomery, two pair 2-story brick and stone dwellings, Dupont street, cost $10,000; Wm. Steward, pair 2 story and attic dwellings, Guelph avenue, cost $4,500; D. Colville, pair 2½-story brick dwellings, 32-34 Seaton street, cost $9,000; Willis Pennock, pair 2½ story brick and stone dwellings, Grace street, near College, cost $7,000; Francis Jones, pair 2½-story brick dwellings, Dufferin street, near Lindsay avenue, cost $5,000; Cosgrave Brewery Company, 2-story brick and concrete warehouse, rear of 297 Niagara street, cost $3,500; W. J. Davidge, pair 2½-story brick and stone dwellings, Bathurst street, near Harbord, cost $8,000; F. A. Galy, 2-story and attic brick dwelling, 44 Beaconsfield avenue, cost $3,000; A. E. Wright and A. Lynn, pair 2½-story stone and brick dwellings, Crawford street, near Harrison, cost $6,000; F. W. Doran, 2-story and attic brick dwelling, Forest Hill road, near Lonsdale avenue, cost $4,000.

Mr. A. H. McDougall, town engineer of Port Arthur, Ont., died very suddenly on February 13th while engaged on some work in connection with the waterworks improvements.

Mr. W. F. Tye has tendered his resignation as chief engineer of the Canadian Pacific Railway, and it is understood will become the head of a new company to be organized for the purpose of engaging in railway building.

CONTRACTS AWARDED.

DANVILLE, QUE.—T. T. Shurtleff, of Coaticook, has the contract for building the new Methodist church.

BARRIE, ONT.—$15,000 town debentures: Canadian Securities, Limited, Toronto, purchasers, $15,447.89.

COLLINGWOOD, ONT.—H. O'Hara & Company, of Toronto, have purchased $32,000 town bonds bearing 4½ per cent.

PICTON, ONT.—The contract for installing the new electric light plant has been awarded to the Westinghouse Company.

GUELPH, ONT.—W. Husson has received the contract for building a double house for ex-Mayor Kennedy to cost $3,000.

KINGSTON, ONT.—W. J. Gates has secured the contract to build the wharf on the shore of Wolfe Island, near Batteau channel.

OWEN SOUND, ONT.—The contract for building the new tunnel at Eugenia Falls has been given to Rowan & Elliott, of St. Catharines.

STRATFORD, ONT. — Two-story white brick machine shop on Dinnie street for George Heinbuch: Masonry, J. Player; carpenter work, D. Easson.

REGINA, SASK.—The tender of Smith Bros. & Wilson, of Lethbridge, has been accepted for erection of new city hall, at price of $108,000. Five tenders were submitted.

NIAGARA FALLS, ONT. — Braas Bros., Niagara Falls, N.Y., have the contract to erect the visitors' gallery in the power house of the Canadian Niagara Power Company.

OTTAWA, ONT.—The following tenders have been accepted for Fat Stock Show building: Brick and masonry, Alexander Garvock, $9,250; carpentry, A. Richards, $11,383; heating, Sheldon & Sheldon, Galt, $3,196; painting, W. J. Carson, $1,700.

TORONTO, ONT. — J. K. Brodie's residence, Roxborough avenue: Masonry and plastering, Dancy Bros.; carpenter work, A. M. Torgis; painting, Thornton Smith & Company; wiring, R. A. L. Gray & Co.; plumbing and heating, Keith & Fitzsimmons. F. S. Baker, architect.

MONTREAL, QUE. — Mackenzie & Mann have given a contract to J. P. Mullarkey and M. J. O'Brien to build a 100 miles extension to the Great Northern Railway in Province of Quebec, consisting of 80 miles from Garneau Junction to Quebec and 20 miles from Montford Junction to St. Jerome.—The contract of building the Grand Trunk Pacific Railway from Touchwood Hills to Saskatoon, a distance of 140 miles, has been let to the Canadian White Company, of Montreal, and that portion from Saskatoon to Edmonton, 317 miles, to Foley Bros., Larson & Company, of St. Paul, Minn. Others who tendered were W. O. Johnston & Sons, McDonald, McMillan & Company and J. D. McArthur.

HAMILTON, ONT.—Supply of sewer pipes: Hamilton & Toronto Sewer Pipe Company, successful tenderers. — The Board of Hospital Governors have recommended that the following tenders be accepted for new building: Central heating system and ventilation, $9,470; concrete piers, G. F. Webb, $59; plate glass and signs, A. M. McKenzie, $380; electric wiring, Stout & Miller, $910; plicaro flooring, W. J. Wall, $788.—The following tenders were received by the Board of Works for this year's supply of cement: Stinson-Reid Building Supply Company, Montreal, $1.78 per barrel; Atlas Cement Company, New York, $1.39 plus duty of 43¾ cents per barrel; Lakefield Portland Cement Company, $1.83 per barrel; Owen Sound Cement Company, $1.88; National Cement Company, Durham, $1.90.—The contract for supplying gravel was given to Armstrong Bros. as follows: West of Bay street, $1.15 a load; west of Emerald street, $1.30; east of Emerald street, $1.55; north of C.T.R. main line, $1.40; east of Sherman avenue, $1.75. The contract for lumber was given to James Thompson at $21.78 per thousand feet.

BIDS.

VANCOUVER, B.C.—Tenders for the paving of Nelson street from Granville street to Stanley Park have been received as follows: Barber Asphalt Company, $50,400; Independent Asphalt Company, $52,700; B.C. Contract Company, three tenders, for asphalt $74,676, bitulithic pavement with concrete base $59,579, bitulithic with broken stone base $57,300; Warren Bituminous Company, Toronto, $58,100.

NEW COMPANIES.

Builders' Wood-Working Company, Limited, Sunny Bræ, N.B., seeking incorporation, capital $20,000. Promoters, John A. Bourque, T. D. Le Blanc, Moncton, N.B., and others.

Dominion Stove and Heater Works, Montreal, Que., incorporated, capital $500,000. Directors, H. L. Mitchell, R. T. Hencker, W. C. Strachan and W. G. Mitchell.

Ever-Ready Fire Extinguisher Company, Limited, Brandon, Man., incorporated, capital $100,000. Directors, Chas. Brent, Joseph McComb and others.

Grand Manan Telephone Company, Limited, Grand Manan Island, N.B., incorporated, capital $2,000. Directors, Geo. E. Dalzell, Alex. Small, of Castalia, N.B., and others.

London Pant, Overall and Shirt Manufacturing Company, Limited, London, Ont., incorporated, capital $40,000. Directors, Thomas Deeley, Adam Thornton and James Granger.

Cheapside Natural Gas and Oil Company, Limited, Cheapside, Ont., incorporated, capital $10,000. Directors, Geo. Sherk, William Atkinson and others.

Fox Brothers & Company, Limited, Windsor, Ont., incorporated, capital $40,000, to manufacture furniture, wood-work, etc. Directors, C. W. Fox, J. K. Henry and others.

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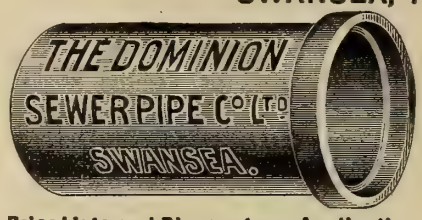

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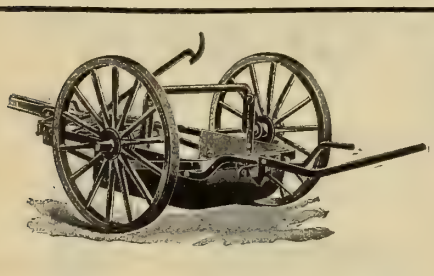

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							Neat.					3 (Sand) to 1 (Cement)				
					Initial	Final	1 dy.	7 dys.	28 dys.	3 mos	1 yr.	1 dy.	7 dys.	28 dys.	3 mos.	1 yr.
1903	20	O.K.	3.135	2.1	162	345	307	701	783	827	*	74	214	299	367	*
1904	44	O.K.	3.150	2.0	132	342	300	744	848	914	938	86	62	354	401	427

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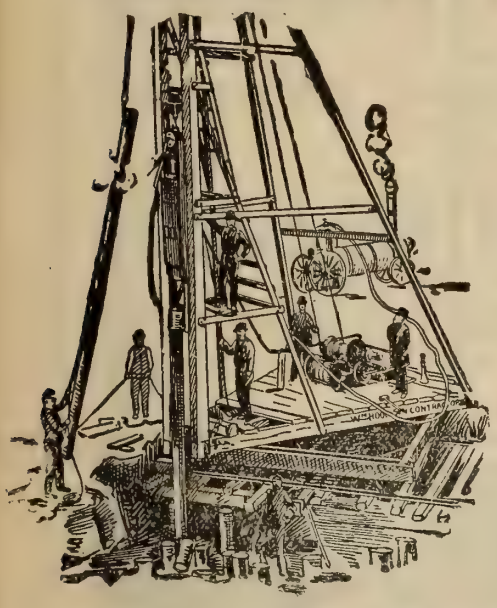

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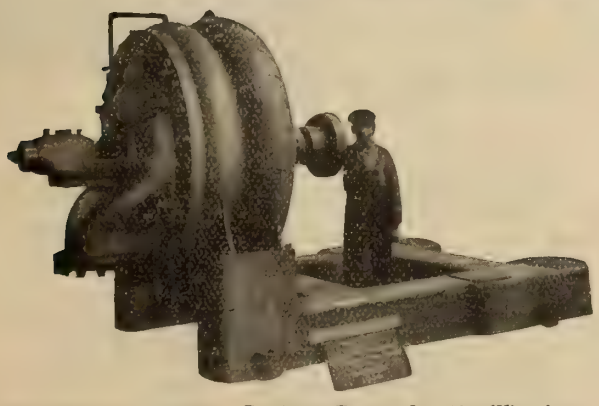

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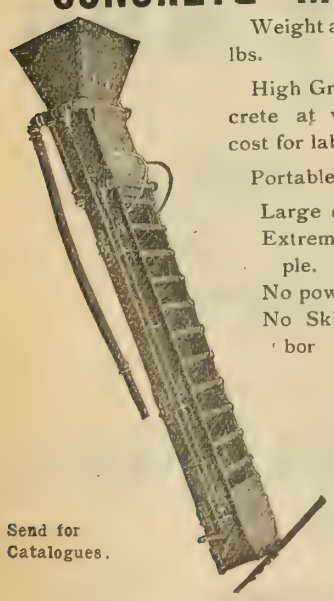

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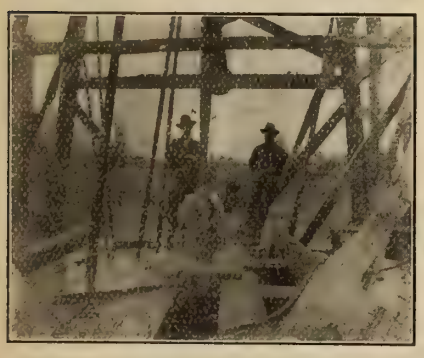

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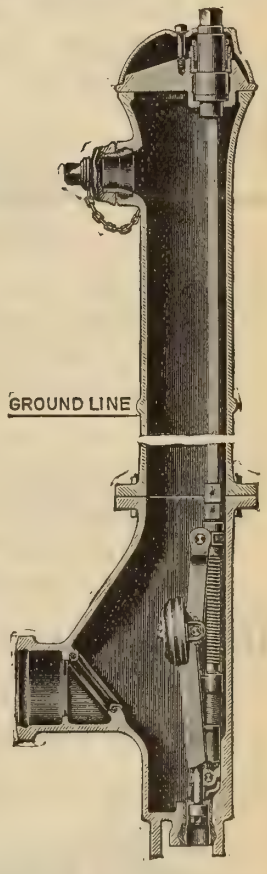

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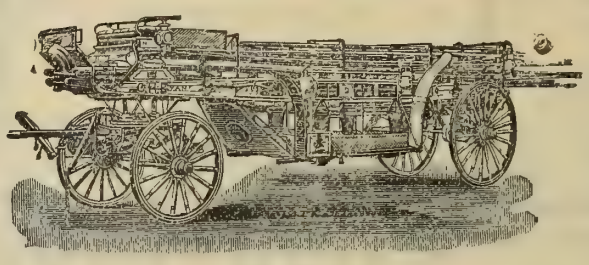

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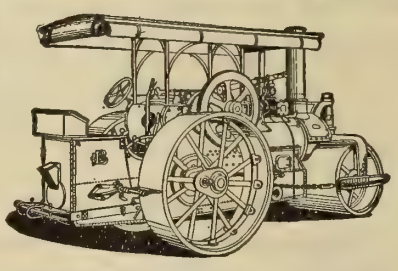

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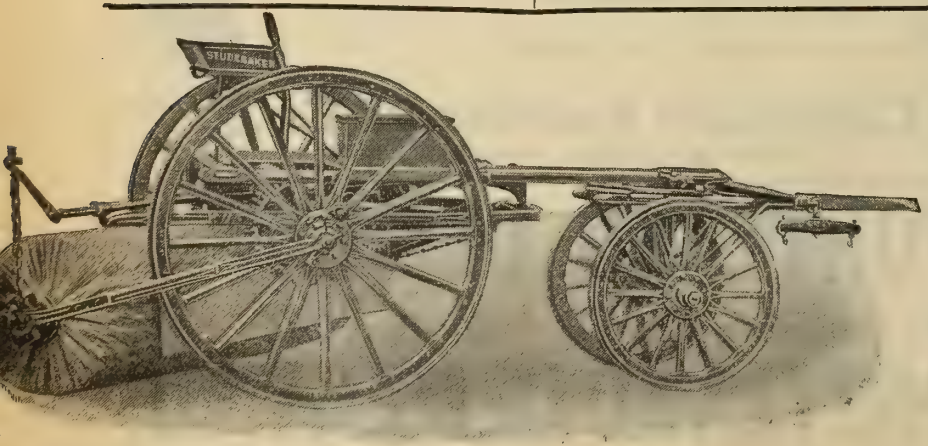

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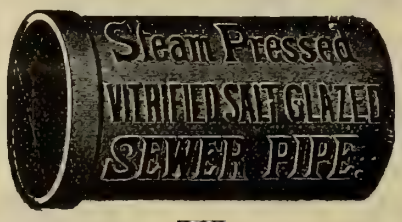

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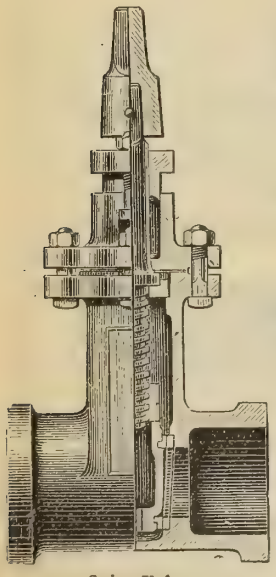
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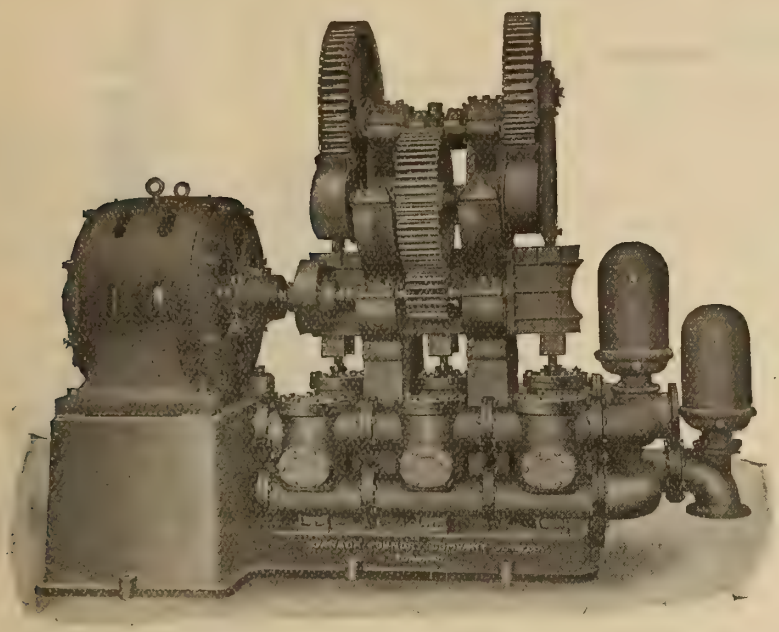

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THE CARTSHORE-THOMSON PIPE & FOUNDRY CO.

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For Water, Gas, Culvert and Sewer

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The Ransome Concrete Mixer is the simplest and most up-to-date machine on the market.

Easy to operate—no intricate parts.

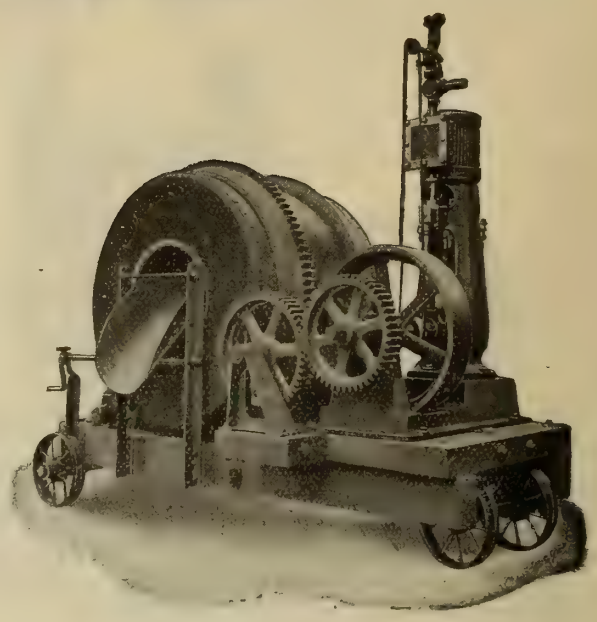
The discharge is rapid and simple, saving the labor of two extra men.

The original cost is low.—The workmanship is perfect. The machine fully guaranteed.

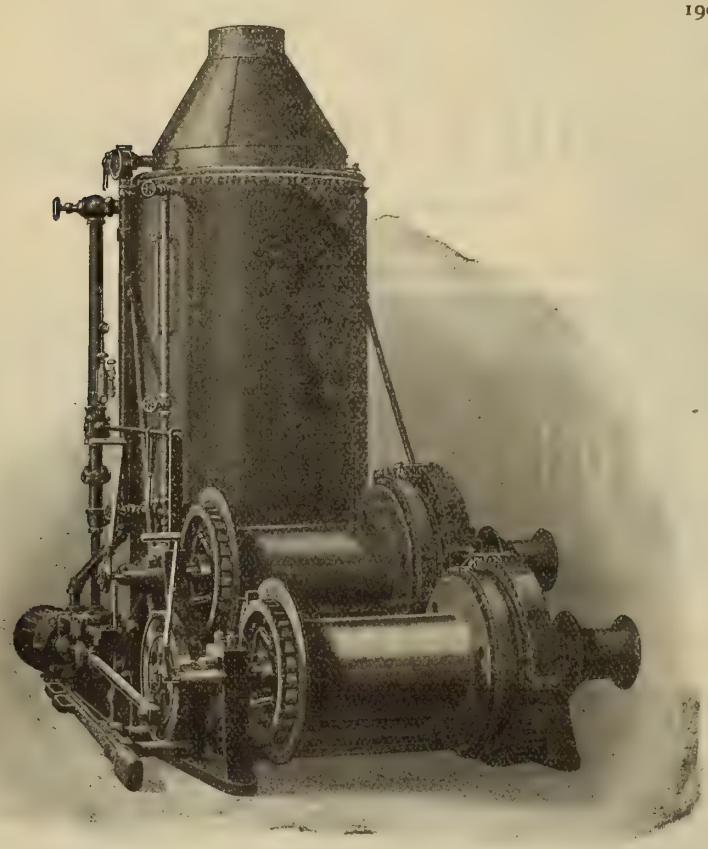
The concrete is unexcelled for strength and uniformity.

What we want is your enquiry—It will pay you to get in touch with us.

MIXERS WITH OR WITHOUT POWER—ALL CAPACITIES.



1906 Model Ransome Mixer. Note heavy gears.



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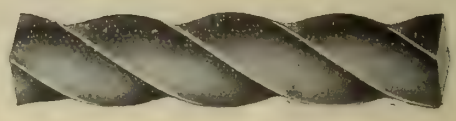

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MONTREAL
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CANADIAN

Contract Record

A Weekly Journal of Public Works, Tenders, Advance Information and Municipal Progress

This Paper Reaches Every Week the Town and City Clerks, Town and City Engineers, County Clerks and County Engineers, Purchasers of Municipal Debentures and Leading Contractors in All Lines Throughout Canada

VOL. 17. TORONTO, MONTREAL — MARCH 7, 1906 — WINNIPEG, VANCOUVER No. 1

THE CANADIAN CONTRACT RECORD
PUBLISHED EVERY WEDNESDAY
As an Intermediate Edition of the Canadian Architect and Builder.

THE C. H. MORTIMER PUBLISHING COMPANY
of Toronto, Limited.

Subscription Price, $2 per annum, payable in advance.

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AGENTS WANTED—TO SOLICIT CONtracts for a street road or pavement possessing many advantages over our present roads. New in this country but successfully laid in Europe for the last thirty years. Address "Municipal," care CANADIAN CONTRACT RECORD, Confederation Life Building, Toronto, Canada.

Tenders Wanted

Tenders will be received by the undersigned up to noon of MONDAY, MARCH 12TH, 1906, for furnishing material and constructing Two Steel Highway Bridges in the Township of East Zorra. One of 70 ft. span, truss, and one of 30 ft., beam. Both to have concrete floors of 14 ft. clear width on expanded metal. Also abutments for same of either quarry stone or cement concrete. Price for abutments to include all excavation.

State price per cubic yard for abutments and per lineal feet for superstructures.

Contractors to furnish plans and short specifications.

The lowest or any tender not necessarily accepted.

Address,

JAMES ANDERSON,
Clerk East Zorra,
Hickson P. O., Ont.

CITY OF BRANDON

Tenders for Cement

Sealed tenders, addressed to "The Chairman of the Board of Works, Brandon, Man.", and endorsed "Tender for Cement", will be received by the undersigned until 6 o'clock p.m. on THURSDAY, APRIL 12TH, 1906, for supplying from 5,000 to 7000 bbls. Portland cement. Specifications and form of tender may be obtained on application to W. H. Shillinglaw, City Engineer, Brandon, Man.

The City Council does not bind itself to accept the lowest or any tender.

GEO. F. SYKES,
Sec'y Treas.

Brandon, February 15th, 1906.

CANADIAN PACIFIC RAILWAY

Tenders covering the work required in connection with Track-Laying, Bridging and Ballasting on the Sudbury branch between Romford and French River Crossing (40 miles) will be received by the undersigned up to noon on SATURDAY, MARCH 10TH, 1906.

Plans and specifications can be seen at the office of the Division Engineer of Construction, 112-118 King Street West, Toronto.

J. W. LEONARD,
Manager of Construction.

TOWN OF OWEN SOUND DEBENTURES.

Sealed tenders, addressed to the undersigned, will be received up to 5 o'clock p m. on FRIDAY, 23RD MARCH, 1906, for the following debentures:

$8,642.96. Twenty years 4 per cent., issued for sewer purposes, dated 6th December, 1905

$12,931.80. Twenty years 4 per cent, issued for permanent walk purposes, dated 6th December, 1905.

$25,000. Fifteen years 4 per cent., issued for loan to factory, dated 22nd January, 1906.

Said debentures, principal and interest, payable at Traders Bank, Owen Sound.

A. J. SPENCER,
Town Treasurer.

Owen Sound, 26th February, 1906.

CANADIAN PACIFIC RAILWAY

Tenders for the work required in connection with grading, bridging, track-laying, surfacing and ballasting that portion of the Toronto-Sudbury Branch between Byng Inlet and Parry Sound, a distance of forty (40) miles, will be received by the undersigned up to noon on WEDNESDAY, 21ST MARCH, 1906.

Plans and specifications can be seen at the office of the Division Engineer of Construction, 112-118 King Street West, Toronto. Lowest or any tender not necessarily accepted.

J. W. LEONARD,
Manager of Construction.

CITY OF EDMONTON, ALTA.

Tenders For

Supplying Cast Iron Water Pipes, Valves and Hydrants.

Tenders are requested for about 500 tons of water pipe and specials. Also for a quantity of gate valves and hydrants.

Specifications and forms of tender supplied on application to J. H. Hargreaves, City Engineer, Edmonton.

Sealed tenders addressed "City Commissioners," Edmonton, Alta., to be delivered to the undersigned not later than TUESDAY, THE 20TH MARCH PROXIMO.

Lowest or any tender not necessarily accepted.

GEO. J. KINNAIRD,
Secretary-Treasurer.

Edmonton, Alta., February 26, 1906.

TENDERS FOR GAOL and HOUSE OF REFUGE.

Separate sealed tenders, marked "Tenders for Gaol" and "Tenders for House of Refuge," will be received by the undersigned up to noon on MONDAY, MARCH 12TH, 1906. Bulk tenders will be received for each building or for each of the several trades as follows:

For GAOL.—1. Mason, brick and plater; 2. Carpenter and joiner; 3 Plumbing, heating and metal works; 4. Painting and glazing; 5. Cells and other steel work, including plumbing connected therewith.

For HOUSE OF REFUGE.—1. Mason, brick and plaster; 2. Heating, plumbing and metal works; 3. Carpenter and joiner; 4. Painting and glazing.

Specifications may be seen at the office of the Counties' Clerk, Cobourg, or at the office of Power & Son, architects, Kingston.

A marked cheque must accompany each tender, for an amount equal to 5 per cent. of the total amount of the tender, which will be forfeited should the contractor fail to enter into a satisfactory contract when notified to do so.

Bonds or approved security for satisfactory completion of the work will be required.

The lowest or any tender not necessarily accepted.

NEIL F. MACNACHTAN,
Counties' Clerk.

Cobourg, March 7th, 1906.

CITY OF MOOSE JAW

TENDERS FOR

BORING WELL for GAS, WATER or OIL.

The Corporation of the City of Moose Jaw will receive sealed tenders, marked "Tenders for Gas Well," up till MONDAY, THE 26TH DAY OF MARCH, at 5 o'clock p m., for the boring of a well on the following conditions, viz:

The City to supply the site, water, and all pipe and casing necessary for the construction of the said well. The contractor to supply the entire plant together with fuel necessary for said construction, and to oblige himself to carry a six inch drive pipe to a depth of not less than 1000 feet.

The tenders to be at a given price for the following depths: 1000 feet; 1200 feet; 1400 feet; 1600 feet; 1800 feet and 2000 feet.

The City reserves the right to stop the work of drilling should a supply of gas be found in quantities to satisfy the City before the depth contracted for has been reached.

Each tender must be accompanied by a certified cheque drawn upon any chartered bank of Canada, payable to the order of the City of Moose Jaw, for the amount of $500, which shall be forfeited should the Contractor fail to enter into a satisfactory contract when notified so to do.

The Council reserve the right to reject any or all tenders. For full particulars as to above, as well as terms of contract, apply to

JOHN D. SIMPSON,
Secretary-Treasurer.

Moose Jaw, 28rd February, 1906.

[FOR ADDITIONAL ADVERTISEMENTS FOR TENDERS SEE NEXT PAGE.]

SEALED TENDERS

for a Residence on Palmerston Boulevard will be received up to and including 17TH MARCH, 1906.

Lowest tender not necessarily accepted.

G. M. MILLER & CO., Architects,
Toronto General Trust Building, Toronto.

WANTED

A first-class General Manager for a supply house; one speaking English and French fluently and with good all round knowledge of builders' and founders' requirements.

Excellent prospect for a man of ability to secure an interest in a live going concern with connections in Quebec, Ontario, North West and Maritime Provinces. Apply with references to

P. O. DRAWER 2330,
Montreal.

To Contractors

Sealed tenders (marked "Tenders for House of Refuge"), will be received up to 12 o'clock, noon, SATURDAY, MARCH 17TH, 1906, for the several trades works required in the erection and completion of a House of Refuge Building in the Village of L'Original, Prescott County, Ontario.

Plans and specifications may be seen and all other information obtained at my office and at the office of J. G. Higginson, Esq., Chairman of Building Committee, Hawkesbury, Ont.

Tenders to be addressed to J. G. Higginson, Esq., Hawkesbury, Ont. Lowest or any tender not necessarily accepted.

WM. NEWLANDS, Architect,
Kingston, Ont.

TENDERS

Sealed tenders, addressed to the undersigned, will be received up to 5 p.m. on the TWENTIETH DAY OF MARCH, 1906, for the building of a stone passenger station at Temagami, on the line of the Temiskaming and Northern Ontario Railway.

Plans and specifications will be on exhibition at the offices of the Commission, 25 Toronto St., Toronto, and at the office of the Chief Engineer, North Bay, on and after March 12th, 1906. Contract will be made subject to penalty for completion within time offered by contractor. Time and price will both be considered.

The Commission will not be bound to accept the lowest or any tender.

H. W. PEARSON,
Secretary-Treasurer.

Toronto, March 5th, 1906.

CONTRACTS OPEN.

COLLINGWOOD, ONT.—Morston Brown will build a brick house on North Fourth street.

VEGREVILLE, ALTA.—The Merchant's Bank will erect a building this spring, to cost $10,000.

TREHERNE, MAN.—The Canadian Bank of Commerce will erect a building on Front street this spring.

WATERLOO, ONT.—Joseph Eckert will erect a two-storey block this spring on King street, to cost about $7,000.

KINCARDINE, ONT.—John McCrimmon will receive tenders up to March 23rd for additions to the High School.

BARRIE, ONT.—John F. Craig has purchased a lot on John street on which he proposes to erect a brick residence.

PERTH, ONT.—Rogers & Stewart will build a three-storey block on the premises now occupied by R. W. Croskery.

RADISSON, SASK.—Wm. Ducklon, contractor, will soon begin to build a two storey block here, to cost at least $3,000.

CAINSVILLE, ONT.—Charles Wilson will erect a cement building this spring on the lot adjoining his residence.

RED DEER, ALTA.—The Town Council have decided to begin the installation of a complete sewerage system this spring.

NEEPAWA, MAN.—A site has been secured and plans prepared for the erection of new curling rink here this summer.

BURLINGTON, ONT. — A public library building is soon to be erected here. W. F. Fisher is interested in the mouement.

WOLSELEY, SASK.—The advisability of installing an electric light plant and operating a telephone system here is being discussed.

HINTONBURG, ONT.—The Redemptorist Fathers of Montreal will build a large college here this spring, to cost about $40,000.

ERIN, ONT.—George Robinson intends erecting a commodious dwelling on Main street on the property lately owned by Isaac Teeter.

CARMAN, MAN. — The Methodist congregation have definitely decided to build a new church during the summer, to cost about $14,000.

SARNIA, ONT.—James Spereman is asking for tenders up to March 10th for an extension to the library building. Plans at the Public Library.

LETHBRIDGE, ALTA.—Wm. Ingram has had plans prepared for the erection of two cottages and a double house on Crabb street.

OTTAWA, ONT.—H. N. Bate has decided to erect a ten-storey apartment house near the city hall. Work will be commenced this summer.

LUCKNOW, ONT. — The Council have chosen a site for the new town hall and public library, for which $7,500 was donated by Andrew Carnegie.

CREDITON, ONT.—The Stephen Council have passed a by-law authorizing the trustees of School Section No. 5 to raise $6,000 for a new school house.

ST. THOMAS, ONT.—N.R. Darrach, architect, will receive tenders up to March 15th for erection of brick school house for S. S. No. 14, Southwold.

PORT COLBORNE, ONT.—The Wainfleet Natural Gas Company, lately incorporated to develop the gas fields in Wainfleet, have headquarters here.

DAVISVILLE, ONT.—F. Goulding will build a house on Balliol street this season—F. Lott and A. Pratt will each erect two houses on the same street.

BELLEVILLE, ONT.—The Government are preparing for the erection of the new armory on the site of the skating rink. It is expected the cost will be $60,000.

EXETER, ONT.—The Kortze Manufacturing Company, of St. Williams, Ont., are negotiating with the Council here for the removal of their works to this town.

MONCTON, N.B.—The Intercolonial Railway shops are to be rebuilt on an improved and extended scale, to cost more than $1,000,000. They will be steel.

SARDIS, B. C.—At a recent meeting of the Methodist Quarterly Board it was decided to erect a new Sunday school building in connection with the church here.

OWEN SOUND, ONT.—Plans have been accepted for an annex to the Collegiate Institute building, two stories and basement, cost $8,000. Forster & Clark, architects.

CHATHAM, N. B.—The time for receiving tenders for steam and electrical apparatus for new light and power station for the town has been extended to the 20th inst.

WINDSOR, ONT. — The Canada Southern Railway estimate an expenditure of $4,000,000 on the Canadian side in connection with the building of the new tunnel.

CAYUGA, ONT.—The by-law was carried last week to raise $5,000 to purchase a site for the Pittsburg Window Glass Machine Company, who are about to locate here.

SYDNEY, N. S.—Inspector Sinclair, in his report on penal institutions to the Nova Scotia Legislature, recommends the erection of a more suitable jail building for Cape Breton.

AYLMER, QUE.—Tenders are being asked for the building of the new club house for the Victoria Yacht Club, Queen's park. The plans call for a building 64 feet square.

LEVIS, QUE.—It is understood that the Laurentian Whitewear Company, of Montmorency Falls, will establish a factory here if the Council will grant certain privileges.

BRANDON, MAN.—It is rumored that the Canadian Northern Railway intends building a line to this city from the Coalfields near Waskada, Man., touching at Elgin and Souris.

MORRISTON, ONT.—Wm. Schultz Puslinch, is asking for tenders up, to March 19th for the erection of a new school building here. Plans may be seen at his residence.

PILOT MOUND, MAN.—Tenders will be received by E. F. Steadman up to April 2nd for the purchase of $14,000 five per cent. debentures of School District No. 105, Manitoba.

ACTON, ONT.—New cement-block stables and sheds are to be built in connection with the Acton House.—N. Forbes will build a two story cement-block residence on Church street.

MAPLE HILL, ONT.—F. Frook, Reeve, will receive tenders up to March 28th for the construction of a pier under bridge over the Saugeen River. Plans are with James Warren and F. Frook.

FORT WILLIAM, ONT.—H. R. Halton, architect, is this week taking tenders for the erection of a brick building for the Baptist congregation. Plans at offices of W. H. Smith or H. R. Halton.

HULL, QUE.—The C. P. R. have purchased a stretch of land 50 feet wide on each side of the railway track near the Interprovincial bridge, the intention being to convert the trestle into an embankment.

PRINCE ALBERT, SASK.—A delegation of citizens recently requested the Dominion Government to guarantee the bonds of the Canadian Northern Railway branch to be built from Prince Albert to Battleford.

ST. JOHN, N. B.—After receiving the report of Ross & Holgate, engineers, of Montreal, on the cost of installing a civic lighting plant, the committee have recommended that immediate steps be taken to install a plant.

PORT ARTHUR, ONT.—A deputation consisting of James Conmee, M. P., Mayor Clavet and others have petitioned the Dominion Government to erect an addition to the post office building and make other improvements.

LONDESBORO, ONT.—Tenders will be received by James Campbell up to March 12th, for the erection of two concrete abutments to support a bridge over the Maitland river. Specifications at the office of the above named.

LYNDHURST, ONT.—B. Dillon, Brockville, Ont., will receive tenders up to March 10th for the erection of a new rectory here. Plans may be seen at office of the architect or of R. J. Gardiner, M. D., Seeley's Bay, or at the rectory.

WALKERVILLE, ONT. — The Home Bank of Canada have purchased a site on Wyandotte street on which they will at once begin the erection of a bank building. Col. Mason, general manager, has been arranging these matters.

HUNTSVILLE, ONT. — Superintendent Tiffin, of the G.T.R., has approved of plans for the Company's wharf extension here. They call for a wide circular wharf of 540 feet for freight and a passenger wharf 117 feet by 36 feet.

MEDICINE HAT, ALTA.—Mayor Forster has been notified that the Alberta Government intend to place $50,-

HEADQUARTERS
MINNEAPOLIS, MINN

CANADIAN ADDRESS
GODERICH, ONTARIO

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ARCHITECT AND BUILDER
GRAIN ELEVATORS

Patent System of Fireproof Concrete Construction.

Goderich, Ont., Feb 15th 1906

Mess. W. H. C. Mussen and Co,
Montreal, Que.

Gentlemen.

In compliance with your request, I am today sending you under other cover, Photo of the two Mixers, as we are using them in the construction of the Elevator here.

As to the machines themselves, there is little to say, They are all right, — our mixing is the easy end of the work. To get a place fixed up to put the concrete into is our trouble.

We think the two machines set side by side is the correct thing to get a constant even flow of fresh mixed concrete.

We are driving the two mixers with a 5x7" engine, mixing batches of 8 cubic feet each.

No mixing outfit could be much better than ours, or give less trouble. Yours Truly.

J. H. Tromanhauser.

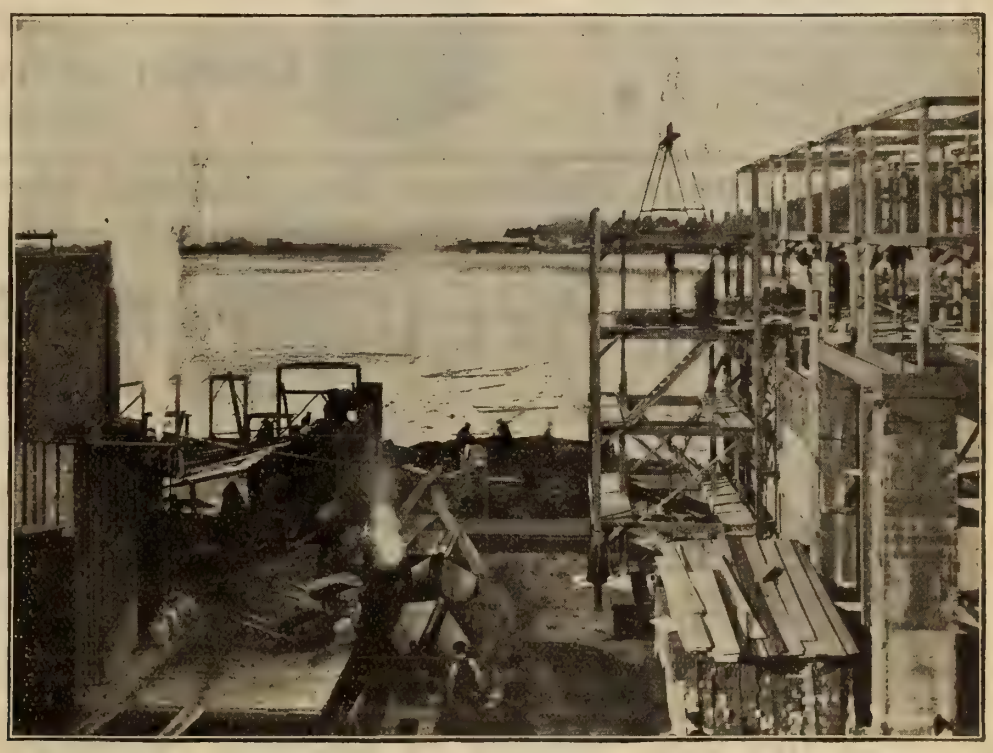
SMITH MIXERS

Do the work and give no trouble

That is why they are used on practically every concrete contract of importance.

We supply them in all capacities, and with mountings to suit any requirements.

Give us an idea as to the work you wish to do.



This shows the two Smith Mixers to which Mr. Tromanhauser refers at work on his contract at Goderich. Note the Sterling Roller Bearing Barrows.

W.H.C. MUSSEN & CO.

Railway, Mining, and Contractors' Supplies

MONTREAL

000 in the estimates this year to build abutments and foundations for a traffic bridge over the Saskatchewan river here.

CALGARY, ALTA.—The Board of Directors of the local Y.M.C.A. are considering plans for their new building to be built on the corner of First street east and Ninth avenue. It is proposed to erect a three storey brick structure 60 by 120 feet.

NEW WESTMINSTER, B.C. — Malins, Coulthard & Co. recently sold the old Douglas-Elliott block, corner Columbia and Front streets. Preparations are being made for the erection of a handsome two story block on the site.

PRUGWASH, N.S.—Fred. Gelinas, Secretary Department of Public Works, Ottawa, will receive tenders up to March 16th, for the construction of a wharf here. Plans at offices of C. E. W. Dodwell, Halifax, E. G. Millidge, Antigonish, at at Post Office here, and at above Department.

PARIS, ONT.—Joseph Pickering will erect a residence on Walnut street.—Dr. McPherson will erect a residence.—Mr. Hurndall will build a house on William street.—Mr. Teakle will build on the lot adjoining his present residence on St. Andrew street.

BRADFORD, ONT.—L. K. Jones, Secretary Department of Railways and Canals, Ottawa, will receive tenders up to April 2nd for deepening a channel from Cook's Bay, Lake Simcoe, to mouth of Holland river and branch to Holland Landing. Plans at office of Chief Engineer of the Department of Railways and Canals, Ottawa.

ST. BONIFACE, MAN.—Theo. Bertrand will receive tenders up to March 9th. for the erection of a combined firehall and police station, corner Goulet street and Tache avenue, cost not to exceed $8,000. Particulars may be obtained from Cecil Goddard, Town Engineer, or from Theo. Bertrand.

COATICOOK, QUE.—J. M. Campbell, of Montreal, proposes to organize a company with $100,000 capital to manufacture all kinds of felt goods. The Council have agreed to give the company exemption from taxation.—A delegation has asked the Quebec Legislature for a grant for a steel bridge to cross the Coaticook river.

BRANTFORD, ONT. — Architect Taylor is preparing plans for remodelling the store on Colborne street, occupied by the Misses Wood. It is to be extended 50 feet and have a new front and an additional story.—The Brantford Street Railway Company have decided to build a loop line through the Eagle Place factory district.

MORRISBURG, ONT. — Tenders are invited by A.A. Logan, Reev, up to March 20th, for the installation of an electrical development plant of 1100 h p. The tenders are to include excavation, transmission line, including cable across, Williamsburg Canal, etc.—At a recent meeting of the shareholders of the Canada Tin Plate and Sheet Steel Company it was decided to have the works extended.

VANCOUVER, B.C.—The Building Inspector has approved of the plans for the new building for the British Columbia Telephone Company, corner of Pender and Seymour streets, to cost about $45,000.—A. S. Cross has taken out a permit to erect a frame dwelling on Nelson street, to cost $6,500.—E. E. Blackmore, architect, is preparing plans for a six story hotel to be built on corner Cordova and Seymour streets, on the present site of the Revere Hotel.

HAMILTON, ONT.—S. H. Kent, City Clerk, will receive tenders up to March 22nd for the purchase of $55,000

Portland Cement...

HIGH GRADE GERMAN BRANDS FOR GRANOLITHIC AND ARTIFICIAL STONE SIDEWALKS.

Sewer Pipes, Best English Cements. Best Belgian Cements
Culvert Pipes, &c. W. McNALLY & CO., Montreal

New Canadian Buffalo Railroad Forge No. 10

Owing to its special design and enclosed parts it is well adapted to withstand rough handling, and, for this reason, is especially valuable to railroad contractors, bridge and tank builders. Is so arranged that it can be operated with a lever at a high rate of speed, and, when not in use, this lever can be removed. Equipped with our famous No. 200 Blower, firmly secure within the body of the forge, dry and clean. Tools may be locked in the hearth at night.

Height to top of bowl, 31 in. Size of hearth, 18 × 18 in. Weight 125 lbs.

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MONTREAL, QUE.

The Good Roads Machinery Co., Limited, Hamilton, Canada
CHAMPION" Full Line of Road Making Machines. THE VERY BEST Send for Descriptive Catalogue and Record

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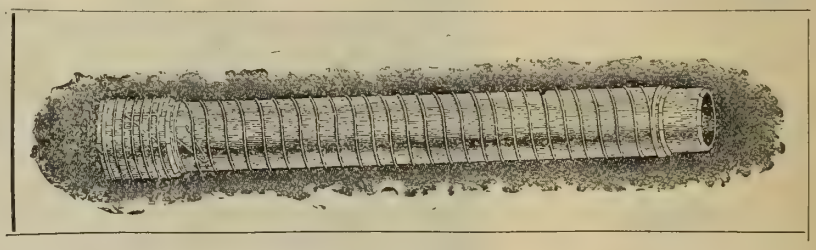
Some reasons why Wooden Pipe is replacing Iron Water Pipe—

Because it is half the price, more durable, easier handled, no frost breaks, no corrosion, no contraction . . . . . .



OUR SEASON BEING OVER

WE OFFER FOR SALE, SUBJECT TO IMMEDIATE SHIPMENT AND PRIOR SALE

100 Lengths, Maclaren's Scotch Spigot and Faucet **Cast Iron Pipes,** 10″ × 65 × 12 Feet
500 " " " " " " " " " 4″ × 20 × 12 "

SPECIFICATION: CAST VERTICALLY IN DRY SAND, HEADS CUT OFF IN LATHE, PROVED TO 300 LBS. AND COATED.

L. H. GAUDRY & CO. IMPORTERS and CANADIAN AGENTS St. Peter St., QUEBEC

four per cent. city debentures.—The Methodists have decided to build a church at Crown Point, just outside the eastern limits of the city.—Harry Daniels is at the head of a syndicate which proposes to erect a vaudeville theatre in this city.—The officials of Hannah Street Methodist church have appointed a committee to procure plans for alterations and improvements to the school room.

WELLAND, ONT. — The Presbyterian congregation intend building a new manse on the site of the present one. —The M. Beatty & Sons Company will erect new buildings and plant this season.—A steel and iron manufacturing company think of establishing works here, at a cost of about $1000,000.—T.L. Nichols, architect, is preparing plans for a three-storey addition, 50 feet by 50 feet, and other alterations to be made to the Mansion House here, at an estimated cost of $7,000.

EDMONTON, ALTA.—The Edmonton Tent & Mattress Company will build a new factory.—Plans for street railway to cost $66,000 are also being considered.—A new C.P.R. high level bridge will be built here to cost $800,000.—The City Alderman at a meeting with C. P. R. officials favored giving the company $25,000 on condition that the shops for the C. & E. and its northern extensions be located here.—Building permits have been issued to John A. Wllson for a dwelling on First street; to A. Carruthers & Co., for a store on First street, and to T. W. Battrick for a dwelling on Fifteenth street.—H. G. Morris, of Tees & Persse, wholesale brokers, Winnipeg, has made arrangements for opening a branch of their business here. They will erect a substantial building at an early date.—J. R. Huttlebach has taken out a permit to build a residence on First street, between Saskatchewan and Calgary avenues.

WINNIPEG, MAN. — The Royal Bank are contemplating opening a branch here and purpose soon erecting a commodious block.—H. C. Stone, architect, has prepared ans for a new theatre to be built here, at a cost of $150,000.—The James McCready Company, of Montreal, has recently been reorganized and will locate their western headquarters here. They intend erecting large warehouses.—Tenders are asked by J. H. G. Russell, architect, for the erection of a brick house on Wellington Crescent for H. H. Bradburn.—Tenders have been taken by the Manitoba Iron

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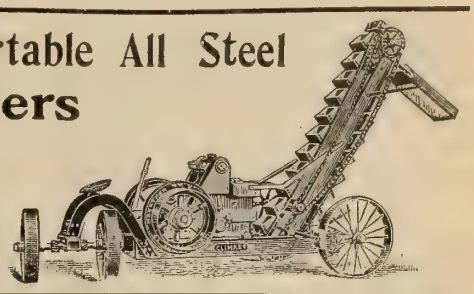

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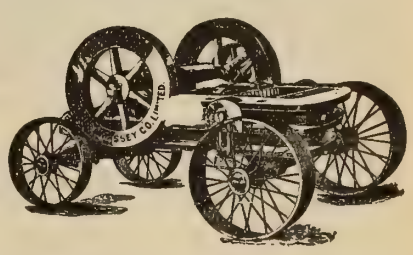

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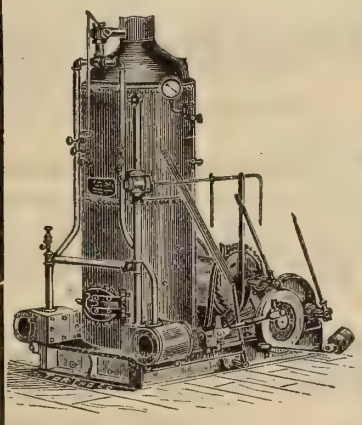

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Works for the construction of a brick boiler and structural iron shop on their premises, Logan avenue. — R. Rogers, Minister of Public Works, will receive tenders up to Saturday, 10th inst., for the construction of drains requiring 808,000 cubic yards of excavation, and up to Thursday, March 8th, for drains requiring 82,000 cubic yards of excavation.—Tenders will be received at the office of C. J. Brown, City Clerk, up to March 13th for supply of 1,000 to 2,000 cords of cedar for block paving; and up to March 27th for supply of 1,000 to 3,000 tons of asphalt for street paving, also up to March 26th for supply of water pipe, specials and water meters. Specifications for above at office of H. N. Ruttan, City Engineer.

MONTREAL, QUE.—The Harbor Board have given their sanction to the agreement with the City for the construction of the new passenger bridge from Commissioners street to Victoria pier, at at estimated cost of $11,000.—Senator Domville, of St. John, N.B., has secured the aid of a powerful English syndicate for the construction of an electric railway from Montreal to Ottawa, and then to the great lakes.—The C.P.R. have decided to rebuild the Ottawa River bridge at Ste. Annes and lay a double track as far as Vaudreuil.—Mrs. James C. McIntyre has purchased property on Craig street, adjoining the Greenshields building, and intends erecting thereon a large dry goods warehouse. — Estimates are now being prepared by the Grand Trunk Railway of the cost of installing a telephone system on all the lines of the company. It is expected that the cost will be between $150,000 and $200,000.—The Catholic School Commissioners have secured authority from the Legislature to float a loan of $250,000 for the erection of additional schools.—The Natural History Society last week decided to purchase a lot on Drummond street for the erection of a suitable building.—Tenders are invited by L. O. David, City Clerk, up to Thursday, 8th inst., for general supplies, including cement, brick, tile pipe, lumber, refined asphalt, iron castings, etc., also for supply and laying of asphalt, asphalt and block, compressed asphalt block, bituminous macadam waterproof, and granite or paving block pavements. Tenders will also be received up to the same date for supply of fire hose, salvage covers, fire alarm boxes, etc.—The Fire Committee last week inspected the fire stations, Chief Benoit having recommended a number of improvements.

TORONTO, ONT. — The Traders' Bank have secured the northeast corner of Yonge and Bloor streets on which they will erect a branch bank.—R. J. Cluff & Company are about to erect a large warehouse on Lombard street for plumbers' supplies.—W. F. Sexton has purchased 88 and 90 Teraulay street and will replace the old buildings by a new up-to-date carpenter shop and office.—Frankel Bros., dealers in iron and junk, have purchased a site, corner Broadview and Eastern avenues, and intend erecting thereon large buildings for their business.—The City Engineer is preparing plans for a sewage disposal system for the newly-annexed Rosedale district.—Robert Miller, R. P. Coulson and Joseph Todd, of Stouffville, William Smith, of Columbus, and W. J. Stark, of Toronto, are organizing a company to build an electric railway from this city to Port Perry, a distance of 55 miles.—A sewer will be laid on Brock avenue from 418 feet north of Cobourg avenue to Bloor street, to cost $3,740.—City Engineer Rust has recommended an asphalt pavement on Adelaide street, from York to Bay, cost $30,679.—The Works Committee have agreed that a by-law be submitted to the people for a subway under the tracks at Lansdowne ave. to cost $400,000.—The Presbyterian Church

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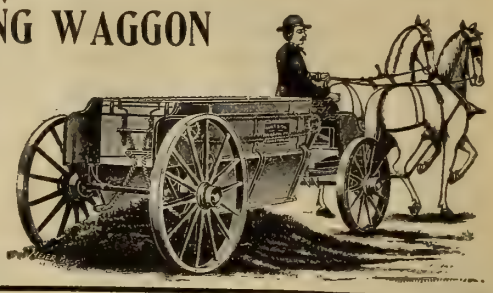

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is making a strong effort to have Knox College transferred to a site in Queen's Park.—The City Council gives notice of the following intended street improvements: Yonge street, reconstruction of asphalt pavement from Queen to College, cost $17,876, and from College to Bloor, cost $17,070; Denison avenue, from Queen street to Bellevue place, macadam roadway, cost $6,623; Bloor street, from Lansdowne avenue to Dundas street, cedar block pavement with concrete curbing, cost $11,359; Brant street, from King street to Farley avenue, brick pavement with concrete curbing, cost $7,133.

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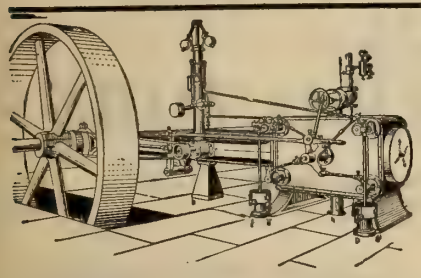

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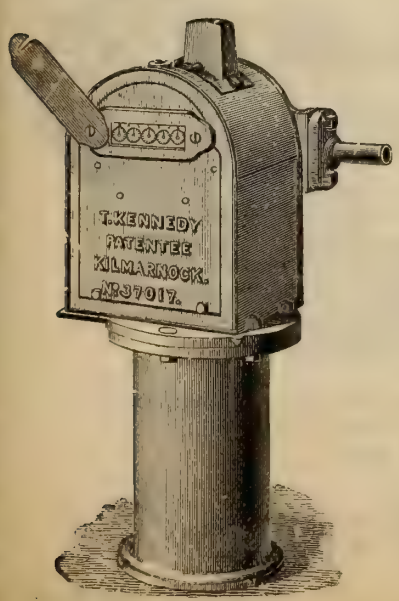

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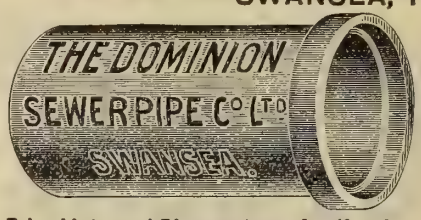

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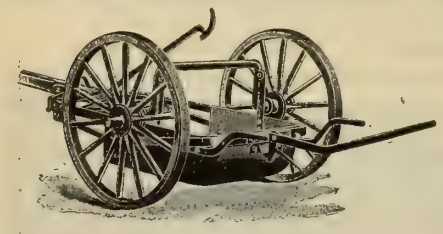

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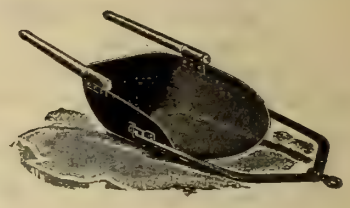

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							Neat.					3 (Sand) to 1 (Cement)				
					Initial	Final	1 dy.	7 dys.	28 dys	3 mos	1 yr	1 dy.	7 dys	28 dys.	3 mos.	1 yr.
1903	20	O.K.	3.135	2.1	162	345	307	701	783	827	*	74	214	299	367	*
1904	44	O.K.	3.150	2.0	132	342	300	744	848	914	938	86	262	354	401	427

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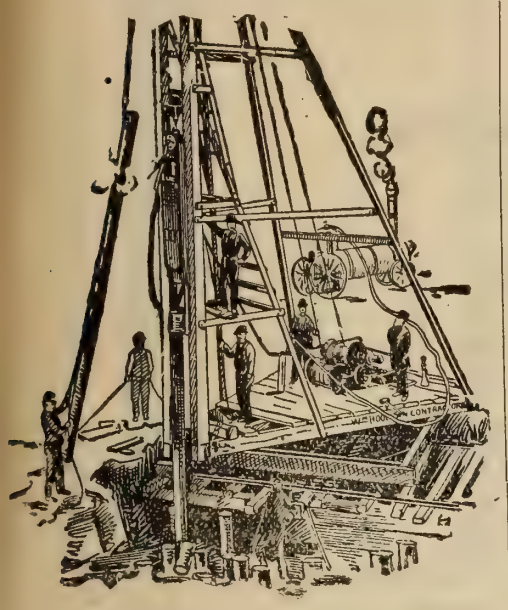

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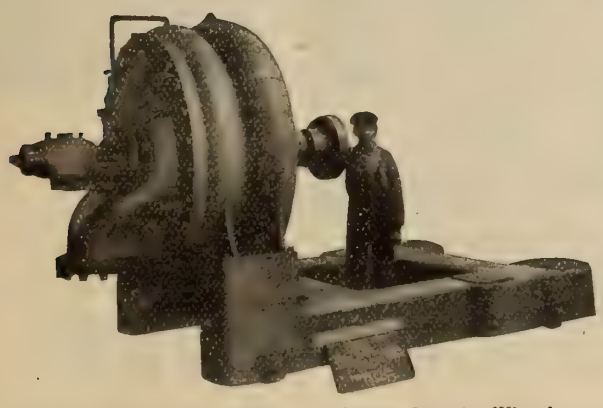

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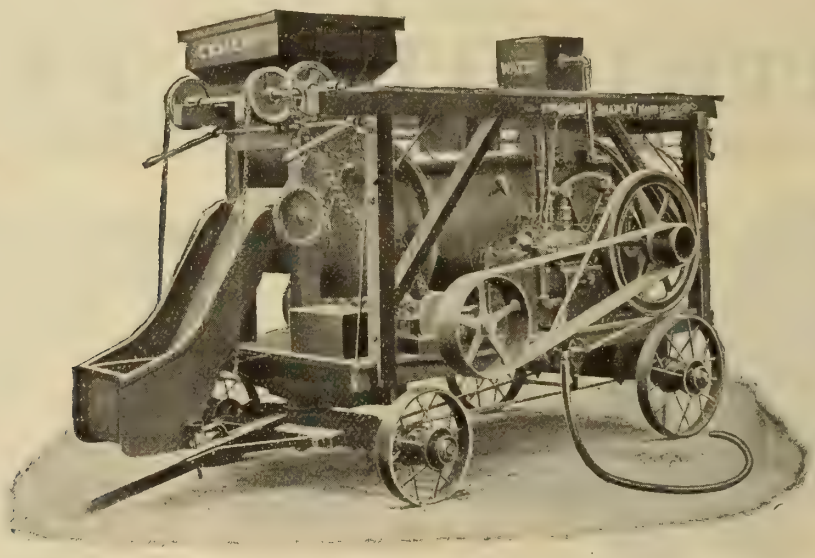

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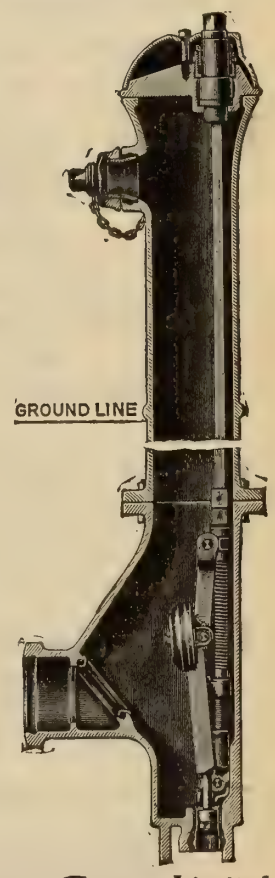

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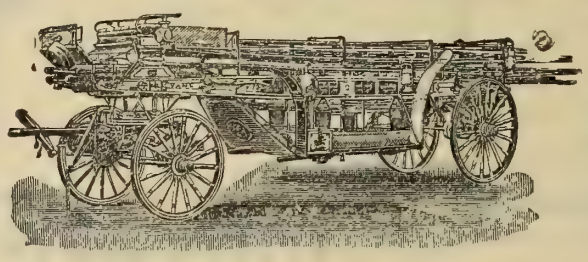

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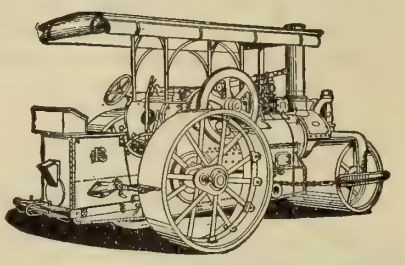

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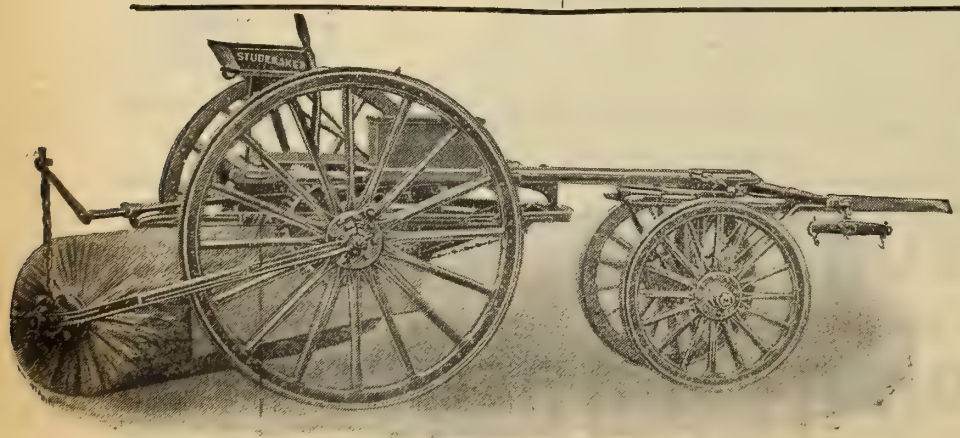

Stackpole Patent Improved **Street Sweeping Machine** Is the Standard of Perfection

Because no sweeper so effectually does the work for which it is designed as "The Studebaker." It Sweeps Clean. No sweeper is constructed with the same degree of care and mechanical precision. It Wears Well. "The Studebaker" has the smallest number of working parts, and has less gearing than any other sweeper made. It is free from all unnecessary complications. With reasonable care it does not get out of order. Send for complete descriptive catalogue.

Studebaker Sprinkler
(PATENT IMPROVED.)

Does not clog or get out of order. Greatest width of spray Can be graded from driver's seat to any volume.

We also make an . .
IMPROVED VERTICAL SPRAY for Pavements.

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CONSULTING CIVIL ENGINEER

820 Union Bank Bldg.
WINNIPEG, CAN.

Municipal Improvements.
Reinforced Concrete and Steel Construction

ARTIFICIAL STONE PAVEMENTS

SIDEWALKS A SPECIALTY

CORPORATIONS Will do well to consider our work and prices before letting contract

The Silica Barytic Stone Company of Ontario, Limited.

WALTER MILLS
General Manager.

Head Office:
INGERSOLL, ONT.

FIRE LADDERS

Our Waggoner extension and other fire ladders are reinforced with steel wire trussing making them at once the **Strongest** and the **Lightest**, as they are the **Cheapest** Firemen's ladders in the market. They are also the **Quickest** operated, a matter of vital moment in firefighting.

Our safety lock is the **Safest** and simplest produced. **Clerks, Councils** and **Fire-Chiefs**, write for circular, &c.

The Waggoner Ladder Co., Ltd.
London, Ont.

WE WILL BOND YOU

Contractors instead of asking friends to go on their bonds should have a company act as surety for them.

Write for Particulars

THE UNITED STATES
FIDELITY & GUARANTY CO.
6 Colborne Street, Toronto

A. E. KIRKPATRICK, Canadian Manager

THE PHOENIX BRIDGE & IRON WORKS, LIMITED
MONTREAL

GENERAL STEEL CONTRACTORS

Large Stock I BEAMS, CHANNELS, ANGLES, TEES, ZEES and PLATES always on hand.

Dominion Bridge Co., Ltd.

P. O. Address, MONTREAL, P.Q.
Works at LACHINE LOCKS, P.Q.

STEEL BRIDGES

For Railways and Highways
Piers, Trestles, Water Towers
Tanks, Buildings, Roofs, Girders,
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The IMPERIAL CEMENT CO.
LIMITED
OWEN SOUND, ONT.

Makers of the Celebrated

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PORTLAND CEMENT

T. M. Morgan

Manufactures the

CRESCENT AND DIAMOND BRANDS

AS GOOD AS THE BEST FOR ANY PURPOSE

Office and Works: Longue Point, MONTREAL, QUE.
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"Lehigh" Portland Cement

Capacity 11,000 Barrels Per Day.

Capacity in 1906 will be 20,000 Barrels per day.
The Lehigh Company are now erecting a plant at Belleville, Ontario, of 4,000 barrels per day capacity. For prices, etc., address—

THORN CEMENT CO. - Buffalo, N. Y.
DISTRIBUTORS FOR CANADA.

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OF MONTREAL, LIMITED

NEW YORK OFFICE:
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Structural Steel
FOR ALL PURPOSES

WORKS:
LONG POINT
MONTREAL

BRIDGES NEW AND SECOND HAND CONTRACTORS' LOCOMOTIVES STEAM SHOVELS

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Electrical Light and Power.
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Paving Granite
Granite Sets for Street Paving. —CURBING cut to any shape ordered. — Fine Rich Colors for Building and Monumental Purposes.
Quarries, St. Phillipe d'Argenteuil, P.Q.
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JOS. BRUNET - COTE DES NEIGES, MONTREAL

WATER SUPPLY APPLIANCES
For Corporations, Municipalities, Villages, Residences, Etc.
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Wood and Steel Tanks, Steel Substructures.
Windmills, Pumps, Gasoline Engines, Hydraulic Engines, Etc.
ONTARIO WIND ENGINE AND PUMP CO., LTD.
TORONTO
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CIVIL ENGINEER
WATER POWER, ELECTRIC RAILWAYS, STRUCTURAL STEEL.
Niagara Falls, Canada
Associated with Charles H. Mitchell, C. E., Hydraulic Engineer.

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STRUCTURAL ENGINEER
Fireproof Steel Office and Mill Buildings, Bridges, Towers, &c. Reinforced Concrete,
CEMENT TESTING LABORATORY
36 TORONTO ST. - TORONTO, ONT

300 MEN
Employed in cement walks, kerb and gutter, Paving and Building Construction. We can do work QUICKER, CHEAPER, BETTER, than small contractors.
Forest City Paving Co.,
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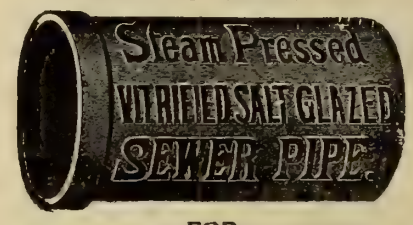
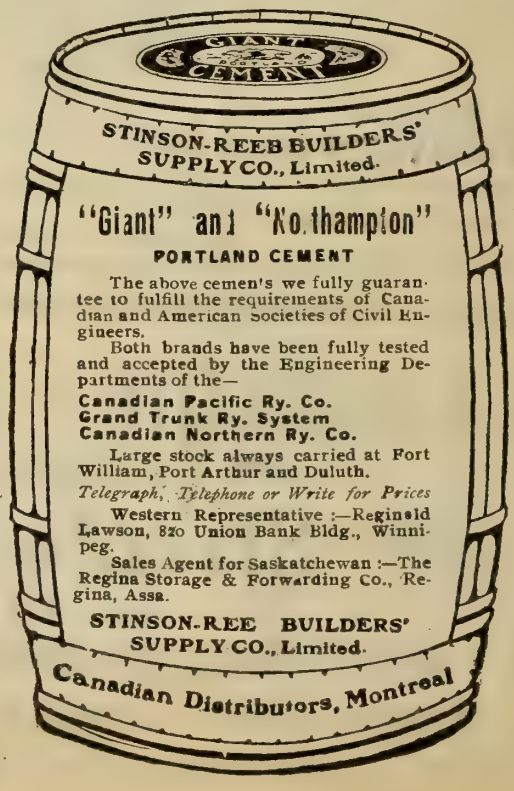
THE ONTARIO ASPHALT BLOCK CO., L'T'D.
MANUFACTURERS OF
ASPHALT BLOCK PAVING
Information and samples furnished municipalities on application.
Main Office : WINDSOR, ONT. Works : WALKERVILLE, ONT.

THE CANADIAN SEWER PIPE CO.
MANUFACTURERS OF



FOR
Sewers, Culverts and Water Pipes
Inverts for Brick Sewers
WRITE FOR DISCOUNTS
ST. JOHNS, P.Q. HAMILTON, ONT. TORONTO, ONT



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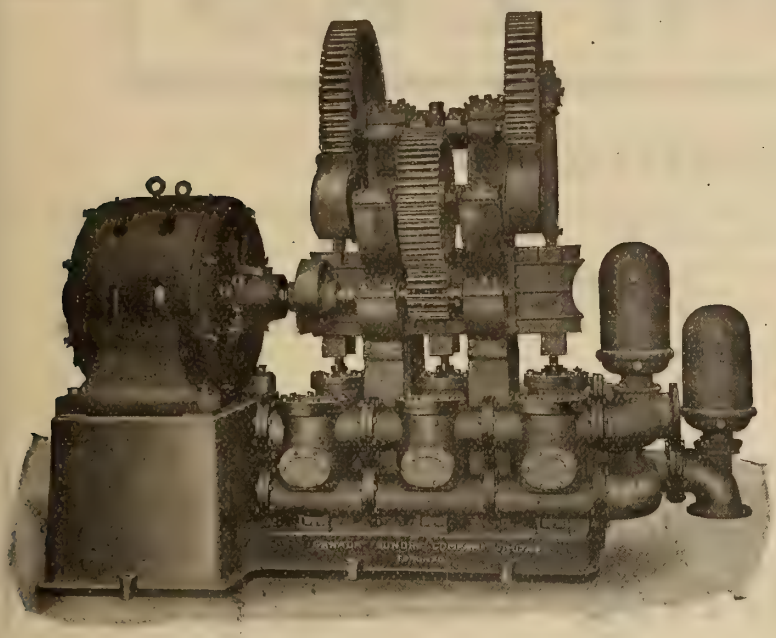
Belted or Direct-Connected to Electric, Steam or Gas Motors



Highly recommended where a constant delivery of water under pressure is desired.

All styles and sizes for all duties.

A full line of waterworks' supplies carried in stock.

Write for Catalogue.

C. G. E. Motor Direct-Connected to Double Acting Triplex Pump.

CANADA FOUNDRY CO., Limited

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Valve Boxes and general Water Works Supplies

Works at: LACHINE, QUE. THREE RIVERS, QUE. LONDONDERRY, N. S.

Combined daily capacity 175 Tons Pipes and Castings.

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Manufacturers of

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CAST IRON PIPE

3 inches to 60 inches diameter.

For Water, Gas, Culvert and Sewer

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To Contractors:

Do you appreciate the fact that when buying Scrapers you cannot afford to invest in poor material. It may mean failure to put through your contract and it will waste time in repairs.

Therefore.

As our Scrapers are all made of the very best material obtainable, you are running no chances whatever when

When you place your order with us.

Wheel Scrapers

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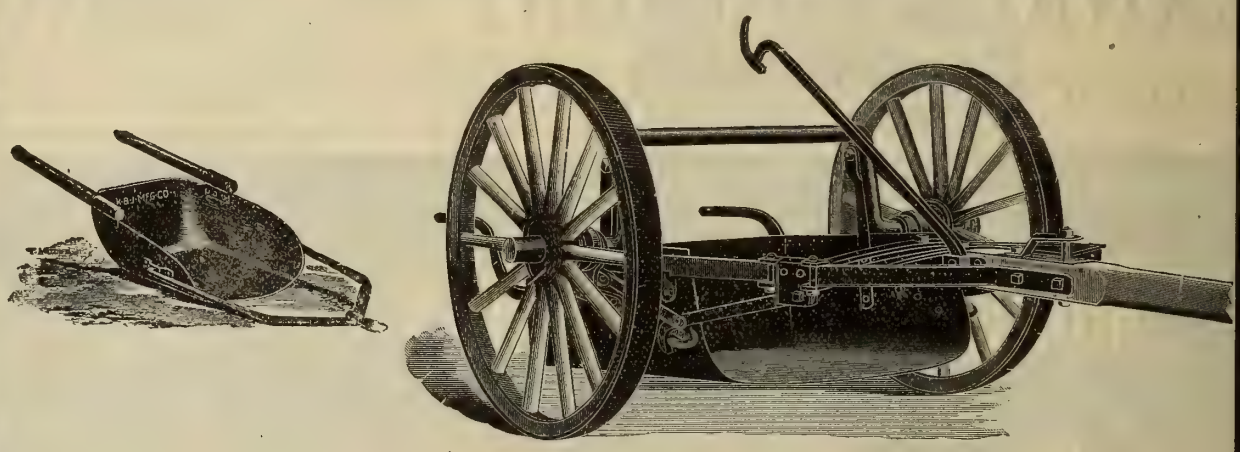
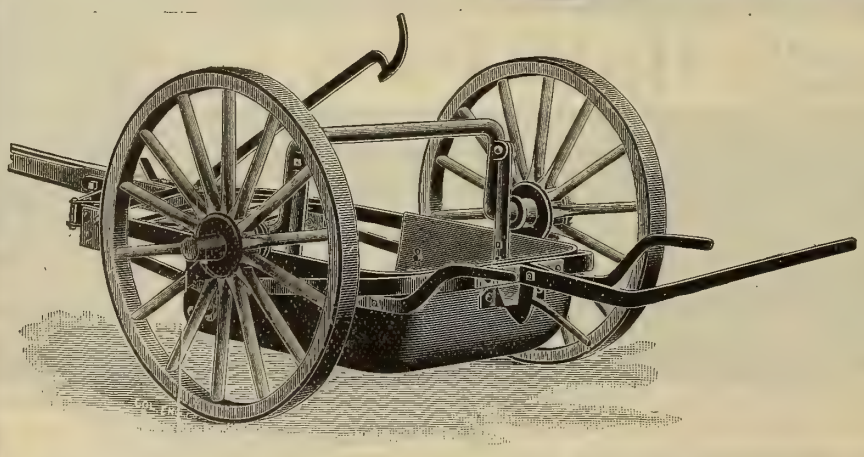
All styles and capacities in stock for immediate shipment





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Successors to the Late James Cooper

MONTREAL

Dunn Bros. & Company, Winnipeg Agents

SPECIAL ADVANCE NEWS AND CONSTRUCTION NUMBER—1906

CANADIAN

Contract Record

A Weekly Journal of Public Works, Tenders, Advance Information and Municipal Progress

This Paper Reaches Every Week the Town and City Clerks, Town and City Engineers, County Clerks and County Engineers, Purchasers of Municipal Debentures and Leading Contractors in All Lines Throughout Canada

VOL. 17. TORONTO, MONTREAL — MARCH 14, 1906 — WINNIPEG, VANCOUVER No. 1

THE CANADIAN CONTRACT RECORD
PUBLISHED EVERY WEDNESDAY
As an intermediate Edition of the Canadian Architect and Builder.

THE C. H. MORTIMER PUBLISHING COMPANY
of Toronto, Limited,

Subscription Price, $2 per annum, payable in advance.

CONFEDERATION LIFE BUILDING, TORONTO
Telephone Main 2362.

Branch Offices:
36 Alliance Building, Montreal,
Telephone Main 2299.

720-721 Union Bank Building, Winnipeg.
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AGENTS WANTED—TO SOLICIT CONtracts for a street road or pavement possessing many advantages over our present roads. New in this country but successfully laid in Europe for the last thirty years. Address "Municipal," care CANADIAN CONTRACT RECORD, Confederation Life Building, Toronto, Canada.

To Contractors

Sealed tenders (marked "Tenders for House of Refuge"), will be received up to 12 o'clock, noon, SATURDAY, MARCH 17TH, 1906, for the several trades works required in the erection and completion of a House of Refuge Building in the Village of L'Original, Prescott County, Ontario.

Plans and specifications may be seen and all other information obtained at my office and at the office of J. G. Higginson, Esq., Chairman of Building Committee, Hawkesbury Ont

Tenders to be addressed to J. G. Higginson, Esq., Hawkesbury, Ont. Lowest or any tender not necessarily accepted.

WM. NEWLANDS, Architect,
Kingston, Ont.

CITY OF BRANDON

Tenders for Cement

Sealed tenders, addressed to "The Chairman of the Board of Works, Brandon, Man.", and endorsed "Tender for Cement", will be received by the undersigned until 6 o'clock p.m. on THURSDAY, APRIL 12TH, 1906. for supplying from 5,000 to 7000 bbls. Portland cement. Specifications and form of tender may be obtained on application to W H. Shillinglaw, City Engineer, Brandon, Man.

The City Council does not bind itself to accept the lowest or any tender.

GEO. F. SYKES,
Sec'y Treas.

Brandon, February 15th, 1906.

TOWN OF OWEN SOUND DEBENTURES.

Sealed tenders, addressed to the undersigned, will be received up to 5 o'clock p m. on FRIDAY, 23RD MARCH, 1906, for the following debentures:

$8,642.96. Twenty years 4 per cent., issued for sewer purposes, dated 6th December, 1905.

$12,931.80. Twenty years 4 per cent, issued for permanent walk purposes, dated 6th December, 1905.

$25,000. Fifteen years 4 per cent., issued for loan to factory, dated 22nd January, 1906.

Said debentures, principal and interest, payable at Traders Bank, Owen Sound.

A. J. SPENCER,
Town Treasurer.

Owen Sound, 26th February, 1906.

CANADIAN PACIFIC RAILWAY

Tenders for the work required in connection with grading, bridging, track-laying, surfacing and ballasting that portion of the Toronto-Sudbury Branch between Byng Inlet and Parry Sound, a distance of forty (40) miles, will be received by the undersigned up to noon on WEDNESDAY, 21ST MARCH, 1906.

Plans and specifications can be seen at the office of the Division Engineer of Construction, 112-118 King Street West, Toronto. Lowest or any tender not necessarily accepted.

J. W. LEONARD,
Manager of Construction.

TENDERS

Sealed tenders, addressed to the undersigned, will be received until noon on THURSDAY, THE 29TH INST., for the construction of the necessary artificial stone sidewalks, curb and gutter to be constructed in St. Thomas during the current year. Plans and specifications to be seen at the office of the undersigned. A certified cheque payable to the City Treasurer for the sum of One Hundred Dollars ($100.00) must accompany each tender; this to be returned when the successful tenderer enters into a contract with the city. The Committee reserve the right to reject any or all tenders.

JAS. A. BELL, City Engineer,
St. Thomas, Ont.

CITY OF EDMONTON, ALTA.

Tenders For

Supplying Cast Iron Water Pipes, Valves and Hydrants.

Tenders are requested for about 500 tons of water pipe and specials. Also for a quantity of gate valves and hydrants.

Specifications and forms of tender supplied on application to J. H. Hargreaves, City Engineer, Edmonton.

Sealed tenders addressed "City Commissioners," Edmonton, Alta., to be delivered to the undersigned not later than TUESDAY, THE 20TH MARCH PROXIMO.

Lowest or any tender not necessarily accepted.

GEO. J. KINNAIRD,
Secretary-Treasurer.

Edmonton, Alta., February 16, 1906.

TENDERS FOR GAOL and HOUSE OF REFUGE.

Separate sealed tenders, marked "Tenders for Gaol" and "Tenders for House of Refuge," will be received by the undersigned up to noon on MONDAY, MARCH 25TH, 1906. Bulk tenders will be received for each building or for each of the several trades as follows:

For GAOL.—1. Mason, brick and plater; 2. Carpenter and joiner; 3. Plumbing, heating and metal works; 4. Painting and glazing; 5. Cells and other steel work, including plumbing connected therewith.

For HOUSE OF REFUGE.—1. Mason, brick and plaster; 2. Heating, plumbing and metal works; 3. Carpenter and joiner; 4. Painting and glazing.

Specifications may be seen at the office of the Counties' Clerk, Cobourg, or at the office of Power & Son, architects, Kingston.

A marked cheque must accompany each tender, for an amount equal to 5 per cent. of the total amount of the tender, which will be forfeited should the contractor fail to enter into a satisfactory contract when notified to do so.

Bonds or approved security for satisfactory completion of the work will be required.

The lowest or any tender not necessarily accepted.

NEIL F. MACNACHTAN,
Counties' Clerk.

Cobourg, March 7th, 1906.

CITY OF MOOSE JAW

TENDERS FOR

BORING WELL for GAS, WATER or OIL.

The Corporation of the City of Moose Jaw will receive sealed tenders, marked "Tenders for Gas Well," up till MONDAY, THE 26TH DAY OF MARCH, at 5 o'clock p.m., for the boring of a well on the following conditions, viz:

The City to supply the site, water, and all pipe and casing necessary for the construction of the said well. The contractor to supply the entire plant together with fuel necessary for said construction, and to oblige himself to carry a six inch drive pipe to a depth of not less than 1000 feet.

The tenders to be at a given price for the following depths: 1000 feet; 1200 feet; 1400 feet; 1600 feet; 1800 feet and 2000 feet.

The City reserves the right to stop the work of drilling should a supply of gas be found in quantities to satisfy the City before the depth contracted for has been reached.

Each tender must be accompanied by a certified cheque drawn upon any chartered bank of Canada, payable to the order of the City of Moose Jaw, for the amount of $500, which shall be forfeited should the Contractor fail to enter into a satisfactory contract when notified so to do.

The Council reserve the right to reject any or all tenders. For full particulars as to above, as well as terms of contract, apply to

JOHN D. SIMPSON,
Secretary-Treasurer.

Moose Jaw, 28rd February, 1906.

[FOR ADDITIONAL ADVERTISEMENTS FOR TENDERS SEE NEXT PAGE.]

WANTED

Good all round Architectural Draughtsman, prospective and color work not necessary. Write at once, stating experience, ability and salary required.

J. H. KENT,
Helena, Mont., U.S.A.

Debentures For Sale

Sealed tenders will be received by the undersigned up till 4 of the clock in the afternoon of TUESDAY, THE 20TH DAY OF MARCH, 1906, for the purchase of One Hundred and Twenty-Five Thousand Dollars of City of Sherbrooke 25 years : debentures bearing interest at four per cent., payable semi-annually, with accrued interest.

The highest tender not necessarily accepted.

Tenders to be marked "Tenders for Debentures"

For full particulars write the undersigned.

F. J. GRIFFITH,
Secretary-Treasurer,
City of Sherbrooke.

Sherbrooke, 6th February, 1906.

TENDERS

Sealed tenders, addressed to the undersigned, will be received up to 5 p.m. on the TWENTIETH DAY OF MARCH, 1906, for the building of a stone passenger station at Temagami, on the line of the Temiskaming and Northern Ontario Railway.

Plans and specifications will be on exhibition at the offices of the Commission, 26 Toronto St., Toronto, and at the office of the Chief Engineer, North Bay, on and after March 12th, 1906. Contract will be made subject to penalty for completion within time offered by contractor. Time and price will both be considered.

The Commission will not be bound to accept the lowest or any tender.

H. W. PEARSON,
Secretary-Treasurer

Toronto, March 5th, 1906.

TOWN OF NORTH TORONTO

Tenders for Boiler, Pump and Heater

Sealed tenders, addressed to the undersigned, and endorsed "Tender for Boiler, Pump and Heater," will be received up to and including MONDAY, THE 26TH DAY OF MARCH NEXT, for a Tubular Boiler, a Compound Duplex Pump, and an Open Feed Water Heater, for the Waterworks System of the Municipality of the Town of North Toronto.

Parties tendering are asked to submit a separate tender for each of said waterworks equipments, or any one item of same.

Specifications are now in the office of the Town Clerk, at the Town Hall, North Toronto (Eglinton) and can be seen at any time during office hours.

The lowest or any tender not necessarily accepted.

WILLIAM J. DOUGLAS,
Town Clerk,
Eglinton P O.

Notice to Contractors

Tenders will be received by registered post only, addressed to the Chairman of the Board of Control, City Hall, Toronto, up to noon on TUESDAY, MARCH 20TH, 1906, for dredging slips.

Also for the supply of cast-iron water pipe for the year ending April 1st, 1907.

Also for the laying of water mains up to 31st December, 1906.

Envelopes containing tenders must be plainly marked on the outside as to contents.

Specifications may be seen and forms of tender obtained at the office of the City Engineer, Toronto.

The usual conditions relating to tendering, as prescribed by city bylaw, must be strictly complied with.

The lowest or any tender not necessarily accepted.

E. COATSWORTH (Mayor),
Chairman Board of Control.

City Hall, Toronto, March 6th, 1906.

ARCHITECTURAL DRAUGHTSMAN

Thoroughly experienced architectural draughtsman wanted. None but first-class men need apply. Box 81, CONTRACT RECORD, Toronto.

TENDERS

FOR THE SUPPLY OF

From 1,000 to 3,000 Tons of Asphalt

Sealed tenders, addressed to Ald. J. G. Latimer, Chairman of the Committee on Works, for the supply of from 1,000 to 3,000 tons of asphalt for street paving for the City of Winnipeg, will be received at the office of the undersigned up to 3.30 p. m on

TUESDAY, MARCH 27, 1906

Specifications and forms of tender may be obtained at the office of H N. Ruttan, City Engineer, Winnipeg.

Each tender must be accompanied by an accepted cheque or draft payable to the order of the City Treasurer, or cash deposit for the sum called for in the form of tender supplied, which will be subject to forfeiture in case of failure on the part of the contractor to enter into a written contract if called upon to do so.

The city reserves the right to reject any or all tenders or to accept any bid which appears advantageous to the City of Winnipeg.

C. J. BROWN,
City Clerk.

City Clerk's Office,
Winnipeg, March 1, 1906.

TENDERS

FOR

GONDOLA HOPPER DUMP CARS

Sealed tenders addressed to the Chairman of the Committee on Works for supply of six Gondola Hopper Dump Cars for the City of Winnipeg will be received at the office of the undersigned up to 3.30 p.m. on

TUESDAY, MARCH 27, 1906.

Description, capacity, cubic feet 800; capacity load, lbs. 80,000; size about 8 x 30 feet. Box arranged so that it can be increased in height to capacity of 1,400 cubic feet. Cars to be strictly self discharging of broken stone and coal, and to be fitted with air brakes complete.

Plans and complete specifications of cars to be submitted with bids.

Each tender must be accompanied by an accepted cheque payable to the City Treasurer, Winnipeg, at par, for a sum equal to 5 per cent. of the total amount of the tender, which will be subject to forfeiture in case of failure on the part of the contractor to enter into a written contract with approved sureties if called upon to do so.

The city reserves the right to reject any or all tenders or to accept any bid which appears advantageous to the City of Winnipeg.

C. J. BROWN,
City Clerk.

City Clerk's Office,
Winnipeg, March 9, 1906.

TENDERS

FOR THE SUPPLY OF

Water Pipe, Specials and Water Meters

Separate sealed tenders, addressed to Ald J. C. Gibson, Chairman of the Fire, Water and Light Committee, for the supply of a quantity of water pipe and specials of various sizes, and water meters for the City Water Works, will be received at the office of the undersigned up to 3.30 p. m. on

MONDAY, MARCH 26, 1906

Specifications and forms of tender may be obtained at the office of H. N. Ruttan, City Engineer, Winnipeg.

Each separate tender must be accompanied by an accepted cheque or draft payable to the order of the City Treasurer, or cash deposit for the sum called for in the form of tender supplied which will be subject to forfeiture in case of failure on the part of the contractor to enter into a written contract with approved securities if called upon to do so.

The city reserves the right to reject any or all tenders or to accept any bid which appears advantageous to the City of Winnipeg.

C. J. BROWN,
City Clerk.

City Clerk's Office,
Winnipeg, March 1, 1906.

To Contractors

Sealed tenders will be received at the office of th undersigned until SATURDAY MORNING, MARCH THE 17TH, for the various trades required in the erection of a Residence near High Park, Toronto, for Sidney Howard, Esq.

The l west or any tender not necessarily accepted.

GEO. W. GOUINLOCK, Architect,
1108 Temple Building, Toronto.

TENDERS FOR TRANSFORMER

Sealed tenders will be received by the undersigned up to MARCH 24TH, 1906, for one 50 Light, 6.6 Ampere, 2200 Volt, Oil Insulated, Constant Current, Automatic Regulating, 60 Cycle Transformer.

Also price of "Air Cooled" one as above.

One Blue Vermont Polished Marble Panel, size 28" x 16" x 1½"; 1 Potential Transformer and 6.6 Ammeter, Connecting Plugs, Fuses and Lightning Arrester, all complete ready to set up

The lowest or any tender not necessarily accepted. Address

W. J. CONRON,
Town Clerk,
Toronto Junction, Ont.

March 9th, 1906

Tenders For Concrete Mixing Machine

Sealed tenders addressed to the Chairman of the Committee on Works for supply of Concrete Mixing Machine for the City Works Department will be received at the office of the undersigned up to 3.30 p.m. on

TUESDAY MARCH, 27th, 1906.

The tenders must be accompanied by a full description and specifications, giving the size and capacity of the machine on which the bid is submitted.

Any further information required will be furnished at the office of the City Engineer, Winnipeg.

Each tender must be accompanied by an accepted cheque, payable to the City Treasurer, Winnipeg, at par, for a sum equal to 5 per cent. of the total amount of the tender, which will be subject to forfeiture in case of failure to enter into a written contract with approved sureties if called upon to do so.

The city reserves the right to reject any or all tenders or to accept any bid which appears advantageous to the City of Winnipeg.

C. J. BROWN,
City Clerk

City Clerk's Office,
Winnipeg, March 5th, 1906.

Tenders for Sewers

Sealed tenders, addressed to Chairman Sewer Committee for the Town of Collingwood, will be received up to 6 p. m. APRIL 28TH, 1906, for the construction of the following sewers in above named town. Tenders will be received for construction only or complete with tile.

PIPE:

400 ft. of 6" pipe
583 " " 8" "
458 " " 10" "
425 " " 12" "
262 " " 15" "
129 " " 18" "
144 " " 20" "
143 " " 24" "
56 pcs quarter bends 6"
384 " 8" x 6" Y jcts
18 " 8" x 8" T
284 " 10" x 6 Y
260 " 12" x 6" Y
128 " 15" x 6" Y
80 " 18" x 6" Y
80 " 20" x 6" Y
10 " 24" x 6" Y

CONSTRUCTION:

Laying the above named pipe.
32 Manholes at $ ....per manhole
18 Lampholes at $..... " lamphole
56 Catch basins at $..... " catch basin
3 Flush tanks at $ .... " flush tank
1 Septic tank at $.....

EXCAVATION:

7000 cubic yds. of sand at....cts. per cubic yd.
5000 " " of rock at $.... " "
12000 " " refilling at....cts. " "

A certified bank cheque payable to the Treasurer, Town of Collingwood, for the amount of 5 per cent., must accompany each tender, the same to be forfeited if the successful tenderer decline the contract or fail in the performance thereof and will be returned in case of non-acceptance.

The lowest or any tender not necessarily accepted.

Plans and specifications may be seen at the Town Clerk's office.

R. McDOWALL, C. E.
Engineer.

JOHN MAIR, Esq.,
Chairman Sewer Committee.

Bevelled Plates for Sale

Two bevelled plates about 7' x 8', special price to anyone able to use them. LUXFER PRISM CO., LIMITED, 100 King St. West, Toronto.

To Excavators

Sealed tenders addressed to the undersigned will be received up to THURSDAY, MARCH THE 15TH, 1906, for the excavating required for a Residence on the west side of Walmer Road, for Edward Gurney, Esq.

The lowest or any tender not necessarily accepted.

GEO. W. GOUINLOCK, Architect,
1108 Temple Building, Toronto.

TOWN OF WATERLOO

DEBENTURES

Tenders addressed to the undersigned will be received up to five o'clock p.m. on the 23RD OF MARCH, 1906, for the following local improvement debentures:

$8008.54 20 years 4½ per cent. dated the 5th of March, 1906.

$4528.32 30 years 4½ per cent. dated the 5th of March, 1906.

A. B. McBRIDE,
Town Clerk.

CONCRETE BRIDGE

Tenders will be received by the undersigned up till 10 o'clock a.m. on MONDAY, MARCH 26TH, 1906, for the Construction of a Concrete Arch Bridge for the Municipality of the County of Wellington in the Town of Harriston, Ont. Plans and specifications may be seen and forms of tender obtained at the office of Mr. James McMurchie, Mayor, Harriston, or of James McEwing, Warden, Drayton P.O.

A five per cent. deposit must accompany each tender.

The lowest or any tender not necessarily accepted.

J. HUTCHEON, Engineer,
Guelph, Ont.

March 12th, 1906.

CONTRACTS OPEN.

KINGSTON, ONT. — The construction of six miles of concrete walks, at cost of about $25,000, will be undertaken this year by day labor.

TILSONBURG, ONT.—N. R. Darrach, architect, St. Thomas, is to prepare estimates on the cost of an addition to the High school here.

COBOURG, ONT. — The Town Council have authorized the issuing of $20,000 of debentures for building a new school on George street.

TORONTO JUNCTION, ONT.—T. Fleming & Sons intend building a brick store and dwelling corner of Laws and Louisa street this spring.

L'ORIGINAL, ONT.—The Ontario Government have approved of a site in this town for the erection of the Prescott County House of Refuge.

BELLEVILLE, ONT.—The County is preparing to erect a House of Refuge. —A Baptist church and several fine residences are to be built this season.

ELORA, ONT.—The following buildings are proposed: Two story and attic pressed brick residence for William Power; similar residence for Alex. Hunter; stone residence for Alex. Moir; small brick residence for John Godfrey; factory addition for J. C. Mundell & Company.

LACOMBE, ALTA.—N. LeBlanc, of the Adelphi Hotel, will build a three-story brick hotel corner Allan and Railway streets, to cost $20,000.—The Western Canada Land & Brokerage Company will build a new brick office on Allan street this spring.

BERLIN, ONT.—The McGregor-Gourlay Company, of Galt, have been negotiating with the Council with a view to locating here.—V. F. Weber will receive tenders up to March 19th for construction of cement walks. Specifications at the office of the Town Clerk.

BRANDON, MAN. — The Brandon Electric Light Company will erect a new brick station for proposed extensions of their plant.—The Great Western Power & Machinery Company, represented by C. B. McAllister, is seeking a franchise for electric light and power. They agree to expend $300,000.

PORT ARTHUR, ONT.—George Clavet will build a two-storey residence here this spring.—Thomas Hanley, architect, has taken tenders for a stone and frame addition to the Queens Hotel, also for an addition to the Canadian Northern Hotel.

CAMPBELLFORD, ONT. — Reeve Dorsee, of this place, and John S. Fielding, C. E., of Toronto, formed a deputation to the Minister at Ottawa recently to secure permission to build a dam across the River Trent at Crow Bay for power purposes. They report favorable reception by the authorities.

ST. STEPHEN, N.B. — The ratepayers voted almost unanimously in favor of installing a waterworks system. The supply will be obtained from near Maxwell's Crossing, about three and a half miles distant, and the cost will be $146,000, which will include a new distribution system for the town. Barbour & Snow, of Boston, are the engineers.

DARTMOUTH, N. S.—Bids will be received by A. Elliott, Town Clerk, up to April 2nd, for pipe and special castings required for waterworks extension. The town has purchased Lake Loon, 3½ miles distant, and the ratepayers have voted $33,000 for an additional 16-inch main from the lake to the town and $30,000 for waterworks and sewerage extensions.

TRURO, N.S.—The following public and private works will be undertaken this year: Improvements to pumping station, cost $10,000; new bank building for Bank of Nova Scotia, cost $30,000; new store for Fraser & Company, cost $20,000; new factory and warehouses for Stansfields, Limited, cost $25,000 to $50,000.

STRATHCONA, ALTA.—The Presbyterian congregation of this place have definitely decided to build a large church this spring, corner Main street and Lumsden avenue. — Mr. Beauchamp, proprietor of the Strathcona Hotel, is planning improvements in that building estimated to cost $8,000.—Tenders will be received by Geo. F. Downes, up to March 15th, for $88,000 4½ per cent. town debentures.

KENORA, ONT.—The Corporation proposes to develop a water power on the east branch of the Winnipeg river, from 5,000 to 7,000 h.p., and to supply electric power to the Maple Leaf Flour Mills Company, who intend building a 2000 barrel flour mill this season. The power development and electric plant will cost about $150,000, and it is expected that tenders for the work will be invited about April 1st. T. Pringle & Son, Montreal, are the consulting engineers.

MONTREAL, QUE. — Plans have been completed for the new Windsor Hotel. A. C. Hutchison is the local architect.—Ross & Macfarlane, architects, have prepared plans for a sandstone building to be built by the Dominion Guarantee Company on corner of St. James street and St. Michael's lane, to be three stories, 39 × 81 feet.— The members of the church of the Messiah have decided to erect a new church to cost $50,000. Rev. W.S. Barnes, pastor.

VICTORIA, B. C.—L. Goodacre & Sons have purchased property, corner Government and Johnson streets. It is understood that they intend erecting a modern building on the Johnson street front to replace the premises now occupied by Peter Brown.—Peter Metro will soon erect a residence on corner of Michigan street and Birdcage walk.—Burt Bros. have purchased property at 27 and 29 Kane street on which they will erect a new brick and stone building.

HALIFAX, N.S.—The Parish of St. Luke's and the Episcopal Church are preparing for the erection of a cathedral for this diocese, estimated to cost about $100,000.—The City will this year expend $100,000 in the construction of new sewers; $150,000 for laying permanent sidewalks, curbs and gutters, and about $75,000 for paving the most important streets. — The Provincial Exhibition Commission will erect several new buildings this year.

HAMILTON, ONT. — E. Brown & Sons are having plans prepared for erection of new warehouse at foot of Macnab street.—William Tout has sold the property, corner of William and Barton streets, on which a restaurant building is to be erected.—Stewart & Witton, architects, are preparing plans for the enlargement of St. Andrews' church, at estimated cost of $17,000.—The Board of Education have decided to add eight rooms to Wentworth street school. Stewart & Witton are preparing plans.

BRANTFORD, ONT.—A by-law will be submitted to the ratepayers on March 22nd to raise $140,000 for the construction of storm sewers and extension of the sanitary sewer system to the low lying areas. Length of storm sewers proposed, seven miles; size of pipe, 12 to 45 inches in diameter. Length of sanitary sewers, two miles; size of pipe, 9 to 15 inches. The work will include a pumping station and iron pipes under the canal and across the river.

NEW WESTMINSTER, B.C.—Grant & Henderson are architects for a large brick and stone block on Columbia street on site of old Douglas Elliott block, to be two stories high on Columbia street and four stories on Front street, also for frame residences for J. R. Gilley and for Dr. Rowthel.—Tenders will be received by the Secretary of Militia, Ottawa, up to April 15th for the construction of a rifle range here. Plans with District Officer Commanding, Victoria, B. C.; Lieut-Col. J.C. Whyte, Vancouver, B. C., and Director of Engineer Services, Militia Headquarters, Ottawa.

TORONTO, ONT.—Currie, Sproatt & Rolph, architects, have taken tenders for the Metropolitan Methodist parsonage to be built at corner of Shuter and Bond streets. — Geo. W. Gouinlock, architect, is preparing plans of residence to be erected on Charles street, estimated cost $8,000; also preparing plans for Press Bureau estimated to cost $20,000, and a Horticultural Building to cost $70,000, for the Canadian National Exhibition Association, also plans and designs of extensive improvements to Union Trust Company's offices, to cost $12,000. Above works ready for tender in a short time.—J. Francis Brown, archi-

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G. W. Essery, Manager.

tect, is asking for tenders for the erection of brick houses on Hawthorne avenue and Barton street. Mr. Brown is also preparing plans for brick houses to be built on Huron street, corner of Dale and Maple avenue, Nanton crescent, College street and Jamieson avenue.—S. F. Baker, architect, is preparing plans for the new Traders' Bank building, corner Bloor and Yonge streets; also two brick houses on Dovercourt Road and a stone house on Russell Hill road.—The store building at corner of Charles and Yonge streets is to be remodelled for a Standard Bank building. A. C. Barrett, architect, is preparing plans.—The old building at north-east corner of Victoria Lane and Queen street is to be replaced by a modern salesroom and office building for the Pease Furnace Company.—The property at Nos. 55 to 61 Queen street west has been purchased by A. W. Austin, who intends erecting thereon a new hotel and several stores.—E. J. Lennox, architect, is receiving tenders this week for the erection of a residence in Rosedale.—Again there is talk of a new theatre to be built on the Baldwin estate, Nos. 77 to 84 King street west, at a probable cost of $100,000.—The Board of Control have selected a site for the new Press building east of the Manufacturers' building on the Exhibition grounds.—Tenders will be received by the Board of Control up to March 20th for dredging slips, supply of cast iron water pipe and laying of water mains. Specifications at office of the City Engineer.—It is rumored that a ten-storey hotel will be built on the north-west corner of Front and Bay streets in conjunction with the Union station, to cost $1,500,000.—A new morgue is to be erected on Lombard street and City Architect McCallum is visiting American cities before preparing plans for the building.--The G.T.P.R. purpose erecting a building on the Exhibition grounds, to cost $50,000.—Tenders will be invited immediately for an addition to the Jameson avenue Collegiate Institute.—Building permits have been granted as follows: H. H. Beck, 2 storey and attic brick dwelling, Schiller avenue, near Poplar Plain road, cost $10,000: R. J. Cluff & Co., 4 storey brick warehouse, 23 Lombard street, cost $35,000; R. M. Case, 2 storey wood and brick dwelling, Ossington avenue, near Northumberland street, cost $19,000; Imperial Bank, 3 storey brick bank and dwelling, King street west, near Spadina avenue, cost $12,500; Miller Nash, 2½ storey brick and stone dwelling, 58 Lowther avenue, cost $20,000; M. Flanagan, 2½ storey brick dwelling, Springhurst avenue, near King street, cost $5,000.

WINNIPEG, MAN.—J. H. G. Russell, architect, has taken tenders for a brick residence on Wellington Crescent for H. H. Bradburn.—Herbert B. Rugh has taken tenders for a brick residence in Crescentwood.—A. M. Fraser is preparing to build a business block corner of Main street and Logan avenue.—Darling & Pearson, architects, will receive tenders up to March 17th for the erection of Canadian Bank of Commerce buildings at Winnipeg, Carman, Treherne and Moose Jaw. — The City Engineer has submitted a report on the water supply, in which he recommends the use of storage tanks.—James Chisholm, architect, has just taken tenders on alterations and additions to a residence on Dagmar street.—The City Clerk is asking for tenders up to 14th inst. for supply of two ten-ton scales, combination beam.—Contracts will be awarded this week for construction of a number of sewers and pavements. — The Winnipeg Grain & Produce Exchange are seeking legislation to enable them to erect a 7-storey building, corner Rorie and Lombard streets.

VANCOUVER, B. C.—The following buildings to be built this year are in the hands of Parr & Fee, architects: The Grey block on Hastings street, brick and stone, three and a half stories above ground, on concrete basement; McLennan & McFeeley Co's. new warehouse, brick and stone, 122 x 175 feet, four stories and basement; frame house for Wm. Clubb; Martin & Nichol's new block on corner of Pender and Seymour streets, brick and stone, 120 x 122 feet; four storey brick hotel on Water street for Mr. McDonald; three storey brick block on Hastings street for Thos. Hunter; new Sunnyside Hotel on Water and Alexander streets, brick and stone, three stories above basement, 66 x 132 feet, cost about $45,000; extension to Empire Hotel on Hastings street east.—W. T. Whiteway has plans out for a four storey stone and brick hotel on corner of Hastings and Carrall streets for J. S. Wood, to have 60 bedrooms and cost about $30,000, also for a frame residence for Col. L. Edwin Dudley on Seaton and Bute streets costing $5,000 and a frame residence for A. C. Stirrett on Robson street costing $3,500.—J. J. Honeyman is the architect for a new frame edifice for St. John's church, seating capacity 1,100, cost about $30,000.—Grant & Henderson are architects for the following: Frame residence for E.S. Lee on Burnaby street; frame residence for A. S. Cross on Nelson street; residence for John West on Burnaby street; remodelling of Bank of Hamilton, corner of Hastings and Hamilton streets; brick and stone block for Wm. Walsh on corner Pender and Richards streets, three stories and basement.

CONTRACTS AWARDED.

WINNIPEG, MAN.—Supply of sewer pipe: E. H. Bissett, successful tenderer.

WOODSTOCK, ONT. — Highway bridge: Hamilton Bridge Works Company, contractors.

EDMONTON, ALTA.—Brick office on Jasper street for Herbert Bowen: Purcell & Foote, contractors.

SPRINGFIELD, N. S.—Twelve houses for Davidson Lumber Co.: A. W. Allan & Son, of Middleton, contractors.

WELLAND, ONT.—Structural steel for Beatty & Sons' new plant: Hamilton Bridge Works Company, contractors.

DUNDALK, ONT.—G. A. Stimson & Company have purchased $13,500 4½ per cent. Union school debentures.

SUMMERSIDE, P. E. I.—Construction of breakwater: Haney & Smith, successful tenderers, price about $140,000.

ALVINSTON, ONT.—Bridge for the County of Lambton: Hamilton Bridge Works Company, successful tenderers.

HAMILTON, ONT.—The contract for supply of cement has been given to Stinson Reeb Company, Montreal, at $1.78 per barrel.

EGANVILLE, ONT.—B. Michael, of Pembroke, has received the contract for building an addition to the Eganville convent.

PETERBORO, ONT.—Purdy, Mansell & Company, of Toronto, have been given the contract for plumbing in the Oriental Hotel.

PORT ARTHUR, ONT.—Grier Bros. have been given the contract for supplying 2,000,000ties for the new Transcontinental Railway.

ST. THOMAS, ONT.—Residence for A. S. Axford, Curtis street: Plumbing and gas fitting, Potticary & Dickson; carpenter work, Alfred Morris.

EAST TORONTO, ONT. — W. C. Charters, of the Kingston road, has been given the contract for the erection of the new High school, Lyall avenue and Charles street.

MONTREAL, QUE.—The Dominion Bridge Company have secured a contract from the C. P. R. to rebuild the two bridges over the Ottawa river at St. Annes, and also to widen all the bridges between there and Smith's Falls.

NELSON, B. C.—W. P. Tierney has been given the contract for the excavation for the British Columbia Copper Company's new smelter at the Boundary.—A. G. Creelman, Rossland, has secured the contract to build the smelter, cost $350,000.

OTTAWA, ONT.—Successful tenderers for waterworks supplies: Hydrants and valves, Kerr Engine Co., Walkerville, $7,779; cast iron pipes, T.S. Kirby, $14,381; castings, Thomas Lawson, $3.25 per hundred weight; brass work, Martel & Langelier, $820; oils and grease, Queen City Oil Company, $359; lead pipe and pig lead, Blyth & Watt, $1,714.

VANCOUVER, B. C.—McQuarrie & Company are the lowest tenderers for the Fourth street sewer, $10,241.47.—Smith & Sherburne, contractors, have been given the contract for the construction of the second wing of the C. P. R. freight sheds, to cost approximately $20,000.—J. M. McLuckie has secured the contract for erection of J. S. Wood's brick block, Hastings and Carrall streets.—E. Cook has received the contract for G. S. McConnell's hotel, Ponnall street, to cost $17,000.—Supply of hydrants: Burns & Co., contractors, as follows: Fifty Ludlow hydrants, $42.15 each, ten flush hydrants, 3 feet 6 inches, $31.20, and ten flush hydrants, 3 feet, $30.50.

TORONTO, ONT.—Dairy buildings for S. Price & Sons, Queen street east: Masonry, Dancy Bros.; carpenter work, Brown & Cooper. J. Francis Brown, architect.—Home Bank, Bathurst and Queen streets: Young & Son, contractors. A. R. Denison, architect.—Bank and residence, Centre avenue and Edward street: Masonry, Teagle & Son; carpenter work, A. M. Torgiss; roofing, R. Rennie & Son; plastering, Beaver & Co.; painting, F. E. Phillips; plumbing, Keith & Fitzsimmons; wiring, W. J. Maguire; heating, Pease Furnace Co. S. F. Baker, architect.—Addition to Havergall College: Carpenter work, S. Hughes; brick work and masonry, J. J. Thompson; plastering, Beaver & Co.; roofing, A. Matthews. G.M. Miller, architect.—Alterations to Pines Hotel, Bloor and Dundas streets: Brick work, M. Manly; carpenter work, T. W. Westlake. H. Simpson, architect. — Contracts for the sewage disposal system for the Woodbine district have been accepted as follows: Sewers and pumping station, Toronto Contracting & Paving Co., $39,422; septic tanks and bacteria beds, F. G. Mortimer, Chicago, $13,000.—The Board of Control have awarded the following contracts for sewers and pavements: Sewers: Roncesvalles avenue, Contracting & Paving Co. $28,904; Poplar Plains road, from 450 feet north of Cottingham to St. Clair avenue, Constructing & Paving Co., $5,500; Poplar Plains road, Dupont street to north of Macpherson avenue, City Engineer, $1,805; Avenue road, St. Clair avenue to Lonsdale avenue, John Maguire, $3,636. Asphalt roadways: Broadview avenue, from Queen to Gerrard, Barber Asphalt Co., $16,048; Birtle avenue, from Dundas street to 430 feet west, Barber Asphalt Co., $1,666; from this point to west end of street, same contractors, $1,057; Alexander street, Yonge to Church, Barber Asphalt Co., $4,675. Bituminous macadam: St. Clarens avenue, from Wyndham street to Dundas street, Godson Constructing Co., $4,675. Bitulithic pavements: Dufferin street, from King street to 1,758 feet south, Warren Bituminous Paving Co., $12,645; Farnham street, from Avenue road to east city limit, the City Engineer, $3,682. Tar macadam: Grace street, from 494 feet north of College to 500 feet further north, Coustructing & Paving Co., $1,857; Farley avenue, from Spadina to Bathurst, Canadian Construction Co., $8,889. Cedar block pavements: St. Clarens avenue, from College street to Dundas street, Constructing & Paving Co., $1,070; Shirley street, from Brock street to St. Clarens avenue, Constructing & Paving Co., $1,600.

THE OUTLOOK.

The construction season into which we have now entered promises to break all previous records, despite the fact that last year was one of unprecedented activity. As a result of the prosperous conditions which have prevailed in both Canada and the United States for the past few years, the general public have plenty of money for building purposes, and barring labor troubles, of which there are no indications at the present time, a large volume of construction work of all kinds will be placed under contract.

A vast amount of railway construction is under way and in contemplation. The most important work, of course, will be the Transcontinental Railway, for two sections of which contracts will be awarded this month. These sections comprise 245 miles eastward from the city of Winnipeg and 150 miles between the city of Quebec and La Tuque. The contract will also be awarded at the same time for a steel viaduct about 3,000 feet long across the Cap Rouge Valley near Quebec. The aggregate value of the contracts above mentioned will be between twelve and fourteen million dollars.

The situation in the building trades is exceptionally bright, a large number of buildings having already been arranged for. The value of building permits issued in Toronto and Montreal during the first two months of this year is greater than for the corresponding period of 1905. There is no cessation of building in Winnipeg, where last year the value of new structures reached almost $11,000,000 The Western Canada Contractor has published a list showing over ten million dollars worth of buildings proposed to be erected in Winnipeg this year, and while some of these may not materialize, the total promises to be increased by the new projects that will develop during the year.

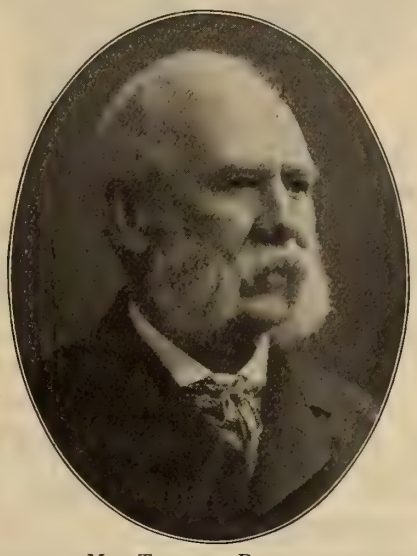
Among the most important works to be undertaken in Toronto is the new Union station, which will no doubt be commenced this spring. The erection of a palatial hotel on the corner of Front and Yonge streets may also be commenced this year. Architects are preparing plans for several other important buildings which will be proceeded with very shortly.

Municipal improvements will receive much attention this year. The installation of waterworks and sewerage systems by the smaller towns and villages is particularly noticeable in the municipalities in Manitoba, Alberta and Saskatchewan. The city of Calgary, for instance, proposes to remove the waterworks pumping station about a mile out of the town, to extend the water mains and sewers and construct a trunk sewer to supply the western portion of the town, at a total approximate cost of $233,000. Electric lighting plants will also be installed by a number of municipalities.

Taken altogether, architects, builders and railroad contractors are likely to experience a busy and prosperous season.

FIFTY YEARS AS CITY CLERK.

Mr. Thomas Beasley, who has recently resigned the position of City Clerk of Hamilton, completed his 51st year of office on the 12th of September last. He was the oldest civic official in Canada in regard to service. He was born in the City of Hamilton on 18th December, 1829. His father was Henry Beasley, whose farm extended over what is now the extreme west end of Hamilton. At first he attended the old log school house on the Dundas Road; from there he went to Doctor Tassie's school in Hamilton, then to college at Cobourg. On leaving college he resided with his uncle, Richard Beasley, senior partner in the leading legal firm of Beasley & Garton. The junior member of that firm afterwards was appointed judge. Thomas studied law and in October, 1854, was appointed City Clerk of Hamilton and in the same year received the appointment of Secretary of the Hamilton Board of Education, which latter position he resigned last month.



MR. THOMAS BEASLEY,
For Fifty Years City Clerk of Hamilton, Ont.

Mr. Beasley has seen his native city grow from a small town to a large and prosperous city, and retires from active life with the good will of all with whom he came in contact. Starting with a legal training, his long period of civic life made him one of the best posted officials on municipal work. As he was necessarily brought in contact with all manner of men during his half century of service, he must have possessed tact in an uncommon degree to retire with the good wishes of all.

Camphor wood paving is to be tried in the Buckingham Palace Road. If within four years it should prove unsatisfactory it is then to be replaced by creosoted deal. The wood has never before been used as paving block.

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HAMILTON, ONT.

ADDITIONAL CONTRACTS OPEN.

OTTAWA, ONT.—The Fire & Light Committee will request the Dominion Government to erect a fire station for the protection of the Parliament Buildings.

MOOSE JAW, SASK.—James Chisholm, architect, is preparing plans for the new Methodist church, to be 76 x 114 feet, brick and stone, cost about $50,000.

PORT CREDIT, ONT. — Tenders will be received up to 25th inst. for the erection of a brick house for the Presbyterian congregation. Plans with A. Weir.

FAIRVIEW, B.C.—Emil Guenther, architect, has prepared plans for a large three-story business block, to be built on corner Granville street and Seventh avenue.

ALAMEDA, SASK. — The Alameda Farmers' Elevator & Trading Company will build this spring, on First avenue, a two-storey brick warehouse 43 by 110 feet.

GUELPH, ONT.—J. A. McHardy is preparing to build dwellings corner of Glasgow and Kents streets.—A new residence will be built for Mrs. Pass on Green street this spring.

CRANBROOK, B.C. — N. Hanson, of Wasa, is completing plans for a three-storey hotel here, 80 × 122 feet.—Extensive street and sidewalk improvements are proposed this year.

ARNPRIOR, ONT. — Plans have been prepared by Pringle & Sons, of Montreal, for the new shirt factory to be erected here. It will be four stories, brick, and cost about $35,000.

GRAYSVILLE, MAN.—The Orange Society purpose building a hall here this season.—It is understood that sufficient funds have been subscribed for the erection of an Anglican church here.

STRATFORD, ONT.—The Borland Carriage Company will enlarge their plant to twice its present size.—The members of the Pastime Gun Club will erect a new club house this spring.

ST. THOMAS, ONT. — The Dominion Bank are making preparations to enlarge their present building on Talbot street.—George Midgley will build a residence on Hincks street this summer.

DUNNVILLE, ONT.—W. J. Aitkens is about to erect a three story hotel, 50 x 150 ft.—Additions will be made to the High school building and the town hall and a new Presbyterian church erected.

WINGHAM, ONT.—The Town proposes building a new High school during the coming summer to cost about $15,000. The School Board are now examining buildings in other towns for plans and designs.

JACQUET RIVER, N.B.—Tenders will be received up to April 16th, at the Department of Public Works, Fredericton, N.B., for constructing a metal bridge 116 feet long. Plans at the above mentioned office.

FORT FRANCIS, ONT. — A new railway 140 miles long is proposed, to run from this town north to the Grand Trunk Pacific near Blackface Rapids, to be known as the Fort Francis, Manitou & Northern Railway.

AMHERST, N.S.—At a meeting of ratepayers it was decided to spend $80,000 for improvements to the waterworks system and $10,000 for extension to sewerage system.—The Marine Winter Fair building will be enlarged, at cost of about $4,500.

MIDLAND, ONT. — Fred Gelinas, Department of Public Works, Ottawa, will receive tenders up to March 23rd for dredging the harbor here. Plans with J. G. Sing, Confederation Life Building, Toronto, Postmaster at Midland, and Department of Public Works, Ottawa.

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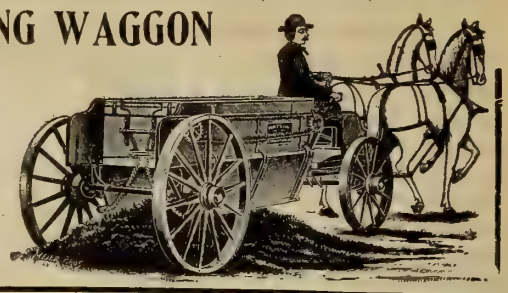

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RYMAL QUARRY	250 TONS		

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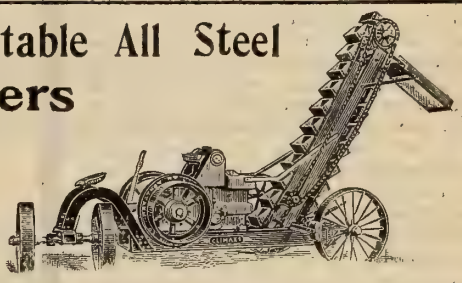

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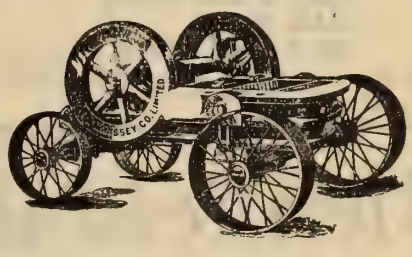

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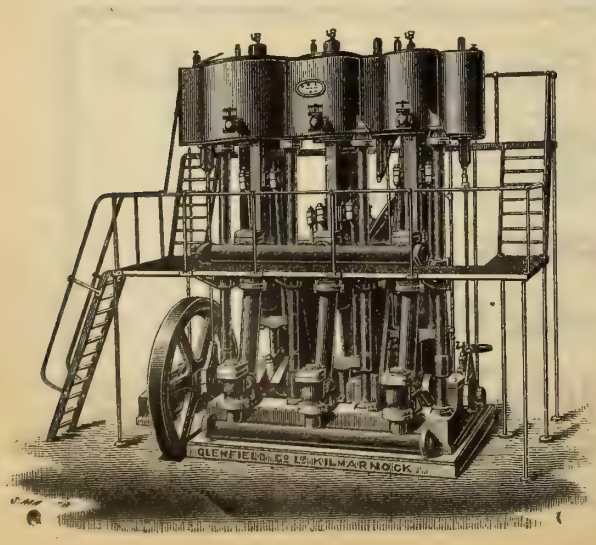

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PUBLIC WATER SUPPLY

By John Galt, C. E. & M. E.

The question of Water Supply is, from every standpoint, one of the greatest public concerns of the day, and from an engineering standpoint particularly, the problem is always exceptionally interesting, as the solutions are in but very few cases exactly alike.

In these days of rapid travel and change, the general public cannot afford, in the interests of health, comfort and safety, to be indifferent to the lack of a thing so necessary to life and health, in all centres of population, whether great or small, as a good water supply for both domestic and fire service.

Although public water supplies were established in the larger and more important cities of Europe and North America over one hundred years ago, it is only within the last fifty years that rapid development has taken place. This development has been such that it is fast becoming the exception for any good sized village or town of 1,000 inhabitants to be without a public supply.

It will be interesting to note the following table, giving approximately the total number of waterworks in existence in Canada and the United States at the end of various periods :

Waterworks Systems in Canada and the United States.

Year.	Number of Works.
1850	100
1860	150
1870	300
1880	700
1890	2,000
1900	6,000

The phenomenal growth and development of the last few years is due in a large measure to the existence of a higher standard of civilization. The manner of living of the present is so very different from that of former generations that it is no wonder an intelligent and progressive people so fully appreciates the vast importance of public water supply.

The two most important uses of a public water supply, whether in a city, town or village, are, firstly, the furnishing of suitable water for domestic use, and, secondly, the furnishing of the necessary carriage for disposing of sewage by means of a sanitary system of drainage. Another very important use is for the extinguishing of fires.

The economic value of good fire protection is directly shown in the reduced rates of insurance which follow its introduction, and its commercial importance is recognized when one considers that the existence of a water supply often determines the location of industries ; indeed, all the benefits accruing from it tend to increase the desirability of a town for many purposes, and to enhance the value of the property therein.

SOURCE OF SUPPLY.

The first thing to be considered when contemplating the installation of a waterworks system is the source from which the water is to be obtained. If the water is to be used for domestic purposes, it must be satisfactory from a chemical and sanitary standpoint and, above all, free from any suspicion of possible contamination, including that most dangerous one from animal and human wastes, generally known as sewage. The supply should be sufficient in quantity, not only for present, but also for future probably greatly increased requirements.

As regards these requisites, namely, quality and quantity, statistics prove conclusively that the introduction of a wholesome and abundant public supply of water has not only lowered the death rate but has improved the general health of the community, the one being of course an index of the other. When it is known that a water is contaminated by sewage, no further test is required to prove that it is in that condition totally unfit for human consumption.

The question of securing an abundant and uncontaminated source of supply is frequently very difficult of solution, especially in thickly settled districts, and sometimes vast sums of money have to be expended in bringing the water for long distances or treating it specially by filtration and other methods.

Rainfall is the primary source of all water supply which is obtained from the earth's surface or from under ground. Surface waters are usually obtained from streams, rivers and lakes, ground waters from flowing springs or wells. These two classes of water often differ very considerably in their chemical characteristics. Surface water is usually softer than ground water, but ground water is likely to be of better quality, from a sanitary standpoint. Surface water is naturally much more liable to contamination, because it absorbs and becomes mixed with the surface waste and general drainage of the area over which it flows.

Rivers being the natural outlets for the drainage of towns located upon their banks, are in consequence very frequently, especially in settled districts, unfit for use. Great efforts are at present being made to lessen or do away with the pollution of lakes and rivers by compelling the partial or complete purification of sewage and other wastes before discharging them into these rivers or lakes.

There is an opinion prevalent that all flowing streams possess the power of self-purification by the oxidation of all organic substances, due in some way to the free exposure to the atmosphere, combined with mechanical admixture, and that contamination practically disappears a very few miles below the point of pollution. This is a dangerous fallacy, because, while there is a certain amount of natural purification apparent, it is almost entirely due to the dilution by the admixture of a large volume of good water and sedimentation, which takes place under favorable conditions on the bottom of rivers. A similar fallacy, although not so prevalent, exists with regard to the pollution in practically slack bodies of water such as lakes.

The chief diseases met with as a result of contaminated water supply are fevers of the typhoid and typhomalarial kind. Nothing has been more clearly established in sanitary science in late years than the fact that typhoid fever is caused by the direct inoculation and contact of a certain germ, which attacks the intestines and poisons the system. These germs can only find entrance through the liquid we drink, or the food we eat.

It is in the water we drink that the greatest danger of taking in these germs lies, and this is proved clearly by the fact that general epidemics of typhoid fever have in 99 cases out of 100 been directly traceable to a contaminated water supply, and that while this disease is not, strictly speaking, contagious, like many other diseases, it can be transmitted and spread in a community by lack of care and cleanliness in handling all substances and materials of any description, which may come into contact with the germs. The public mind is very often confused and led to attribute typhoid to other causes, such as foul air, including sewer and other noxious gases, which of themselves can only produce diseases of the respiratory order, such as tonsilitis, scarlet fever and diphtheria.

The experience of many large towns and cities has been that with the growth of population the danger of typhoid epidemics has increased. This has been strikingly so in places situated near rivers or lakes, where the surface waters serve the dual purpose of public water supply and sewage disposal.

With the natural growth of population the area of pollution is constantly increasing, and hence supplies, which at one period may have been quite safe and satisfactory, are becoming more and more endangered.

There is an immense evaporation, which is everywhere taking place from the earth's surface. The amount of evaporation differs in different localities on account of

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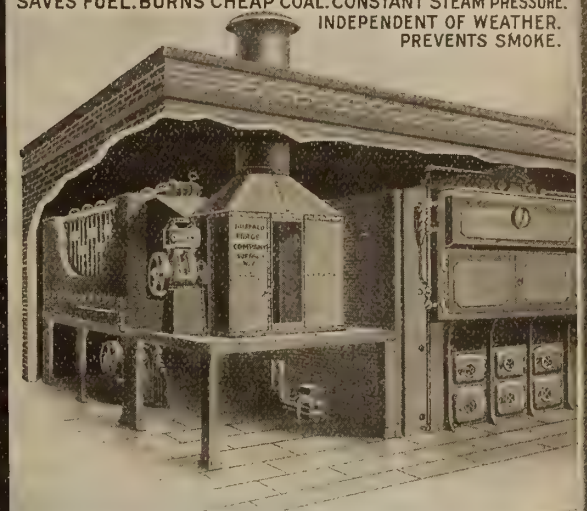

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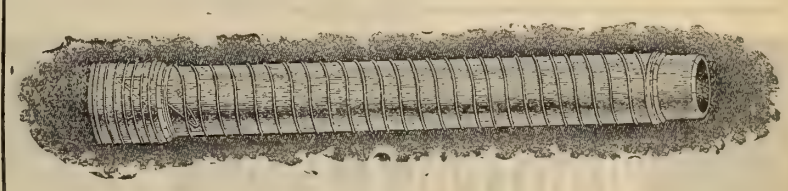

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difference in altitude and in atmospheric conditions. This question of evaporation is one of the many which must always be taken into consideration in calculating the amount of water available from the rainfall on a given area of watershed. As a general rule, the amount of evaporation on ponds and lakes will balance the total amount of precipitation of snow and rain on them. Take for example the case of Lake Superior. The average rainfall upon this lake is 22 inches. The evaporation would appear to be even greater than this, namely, 24 inches, so that more water is raised from than falls upon it. Its level is maintained only from the surplus which flows into it from streams, which drain its enormous watershed.

GENERAL COST.

While the questions of quantity and quality are always of first importance in the selection of a source of supply, the question of cost bulks very largely in the solution of a waterworks problem. With two or more sources at hand, equally suitable as to quantity and quality, the question as to which shall be adopted depends on the cost. Speaking generally, the first or initial cost plus the capitalized cost of maintenance and operation will determine the matter.

In supplying water to communities, there are only two systems, natural gravitation and pumping. Sometimes, however, a combination of these two systems is necessary to give not only the supply, but also the requisite pressure for purposes of domestic distribution and fire service. The simplest and most economical system is by far that by natural gravitation, especially where the source of supply is not far distant and is located at a sufficient elevation to give the desired capacity and pressure for all purposes.

The cost depends, of course, entirely on local conditions, but when it is considered that many of even the very small systems, in Canada for example, have been designed as gravitation works, bringing water from a distance of several miles for profitable distribution, proves conclusively the preference which should always be given to a gravitation system over a pumping system.

WATER METERING.

The question of installing meters on all the consumers' service connections is one which does not receive the attention and consideration which its importance deserves. In this respect Canadian practice is far behind that of Europe and even of the United States.

The first effect of metering is to materially lessen the useless and inordinate waste of water, and to confine the amount used to that required for legitimate uses only. The charging for all water used at a fixed rate per thousand gallons, that is, paying for what you get and getting what you pay for, would appear to be the proper policy, but, for one reason or another, it has not as yet made much headway in Canada.

There are many other advantages, both direct and indirect, which follow the metering of the water supplied: for example, in the case of a system which has to pump every drop of water used, the direct saving in machinery and cost of operating is very great, because ordinarily the amount requiring to be pumped is reduced by about one-half.

The capacity of all mains and distribution pipes with regard to fire service is, when the limiting maximum is required, indirectly increased on account of the flow for domestic purposes being decreased. This latter advantage is not only the case in a pumping system, but also in the case of a gravitation system. It follows also that where there is a difficulty in obtaining a sufficient water supply, the installation of meters will put off the date at which steps must eventually be taken to spend more money to obtain a more bountiful supply so as to meet the demands of increased consumption.

There are perhaps some few cases and conditions in which the advantages of a meter system are not so apparent: for example, a system which has an abundant supply by gravitation and is designed on a fairly large scale for carrying and distributing capacity to meet the future possibilities of a large growth in population. In this case, the flat rate would be found quite suitable for some years to come, and thus to this extent be slightly more simple and economical in saving the cost of and trouble in maintaining meters.

For some reason there appears to be a natural aversion, on the part of consumers, to paying for water by measurement, but if the consumers would take the time to intelligently consider the question, a very different opinion would prevail, because it means not only cheaper water to the consumer, who should pay for the cost of operating, but also a saving to the taxpayer whose property is mortgaged for the debenture debt which covers the initial cost of the waterworks.

The new additions to the Dominion Gas Meter Works, London, Ont., are now almost completed. These comprise a 20 x 24 ft. addition each to the testing department and the shipping department. They have also purchased three large lots adjoining, which gives them the entire block from Garfield Ave. to West Ave. It is their intention to build anotner addition to their works this spring.

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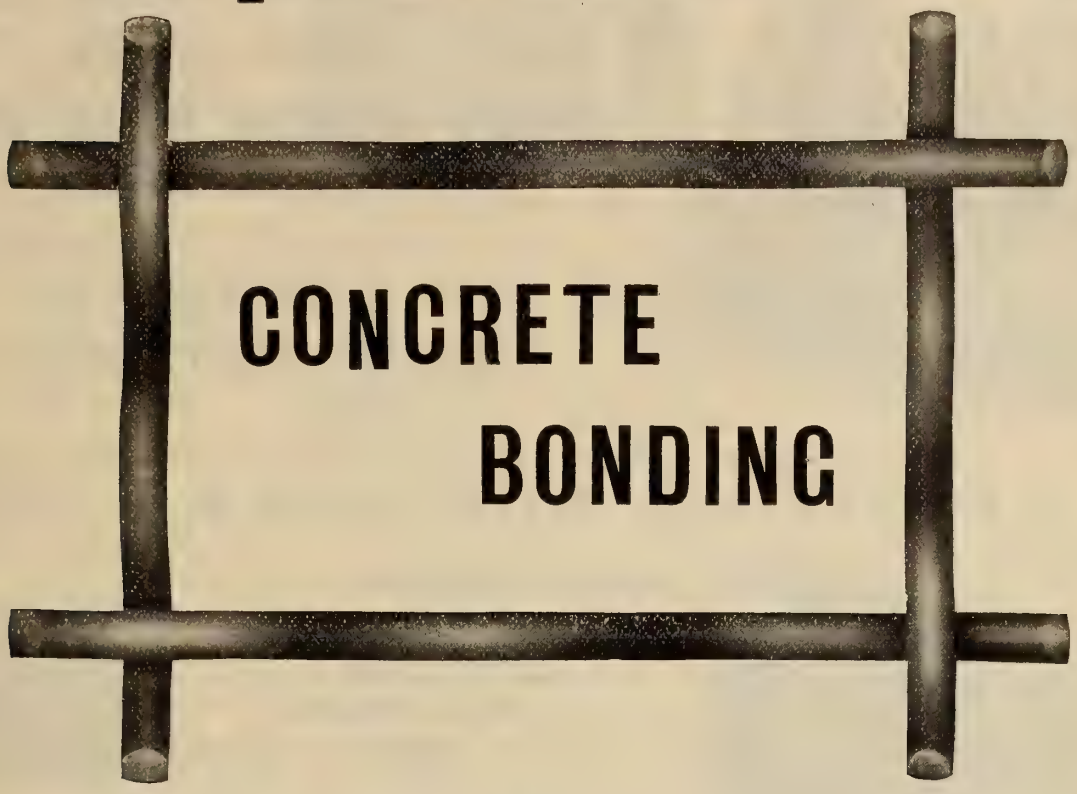

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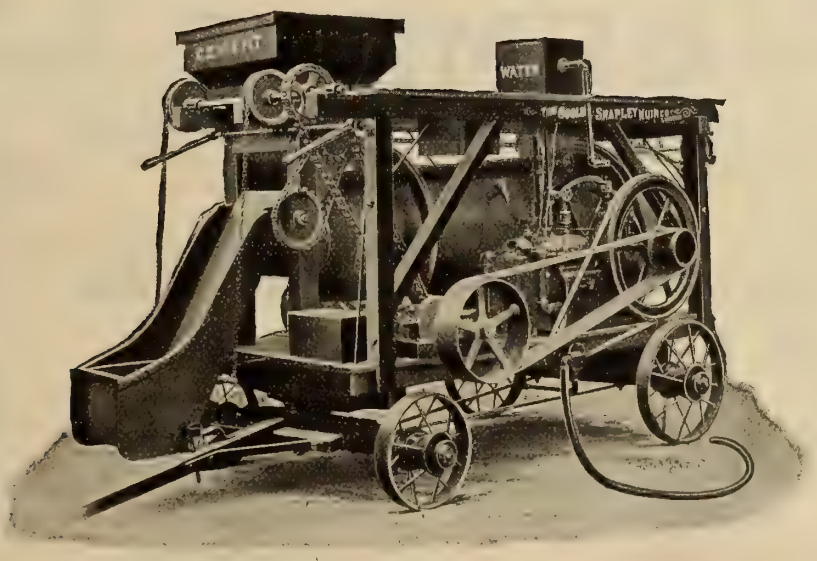

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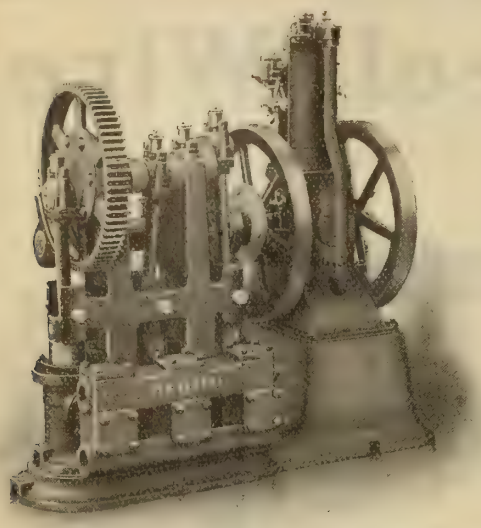

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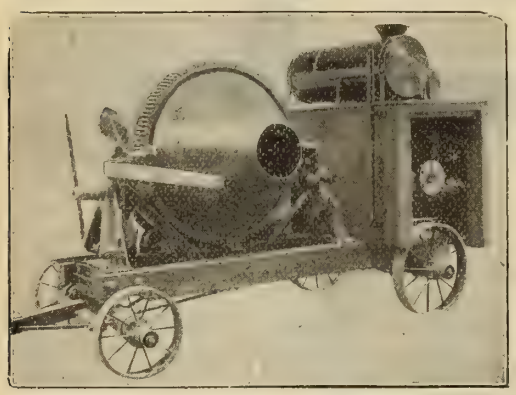

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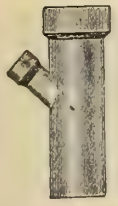

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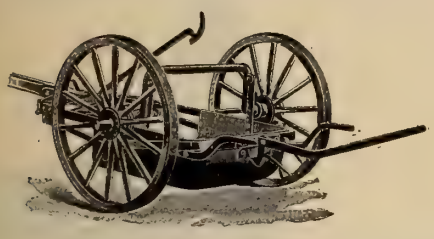

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BY

The City Engineer of Toronto for 1903-4

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Year.	No Samples Tested.	Soundness Faiji Test.	Specific Gravity	Residue in Test on No. 100 Sieve	Setting Time in Minutes		Tensile Strength in pounds per square inch.									
							Neat.					3 (Sand) to 1 (Cement)				
					Initial	Final	1 dy.	7 dys.	28 dys	3 mos	1 yr.	1 dy.	7 dys.	28 dys.	3 mos	1 yr.
1903	20	O.K.	3.135	2.1	162	345	307	701	783	827	*	74	214	299	367	*
1904	44	O.K.	3.150	2.0	132	342	300	744	848	914	938	86	262	354	401	427

* Tests for 1 year were not completed when records closed. 1905 report not yet issued.

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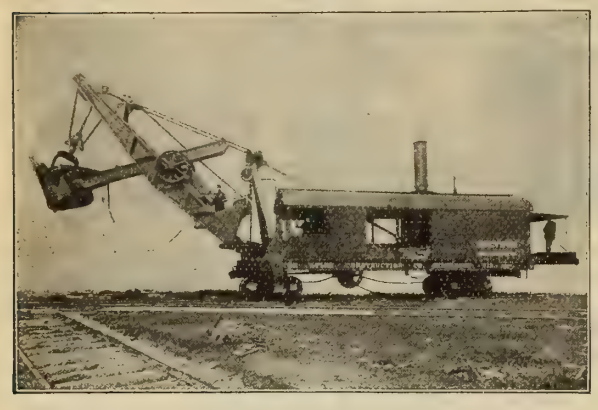

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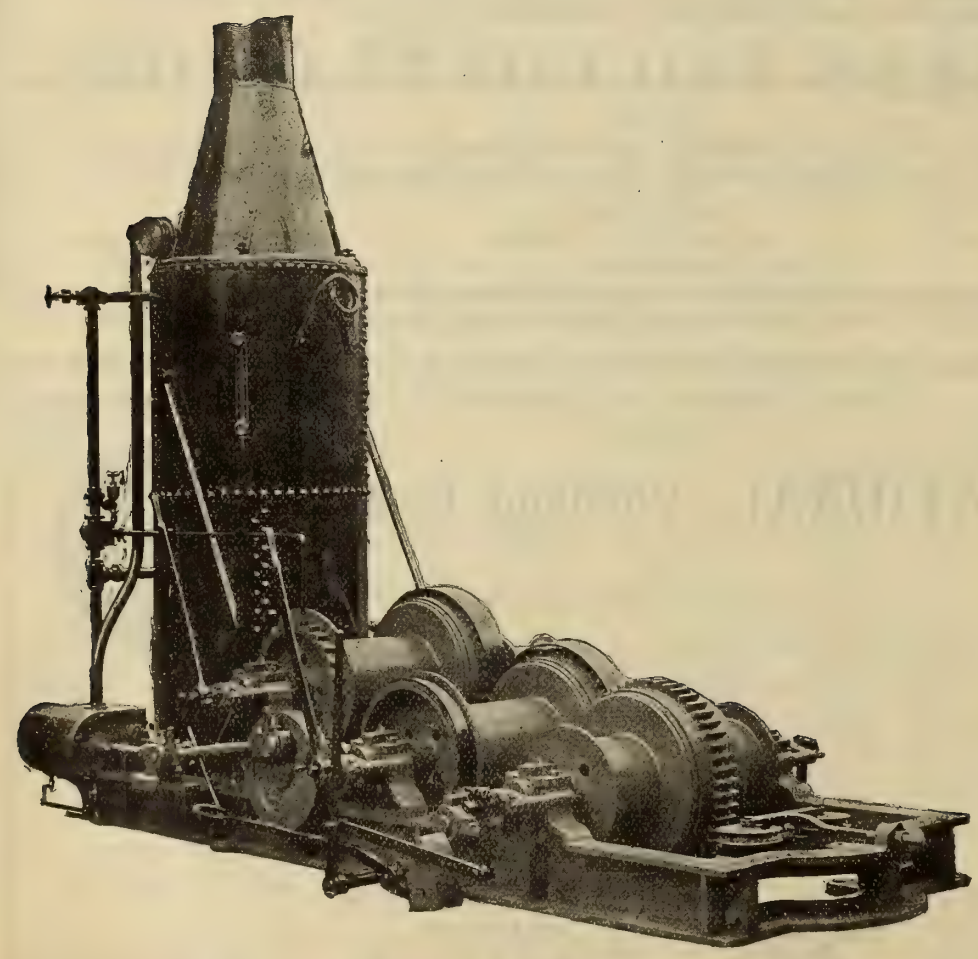

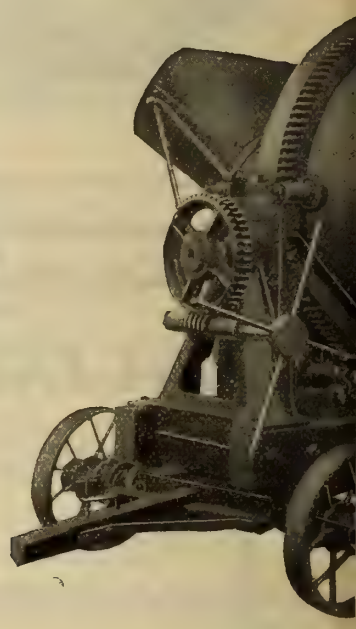

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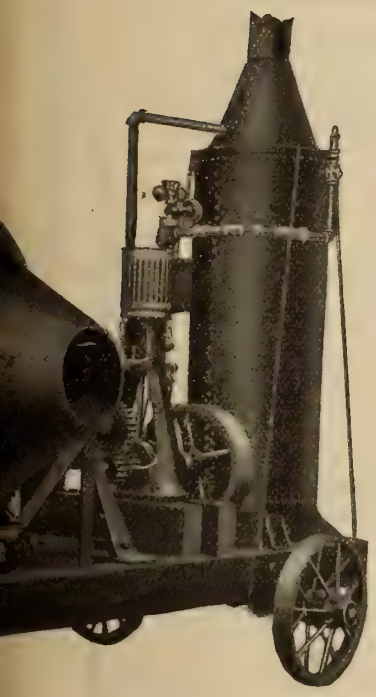

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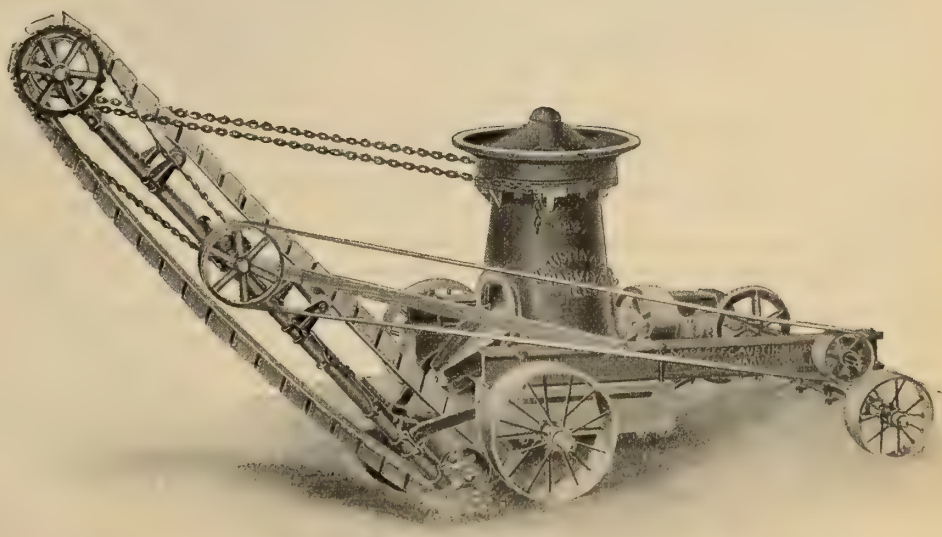

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MUNICIPAL ACCOUNTING

By F. H. Macpherson, F. C. A.

It will doubtless be of interest to readers of the "Contract Record" to learn that the province of Ontario was the first of the provinces of the Dominion, and was years ahead of any of the United States, in its endeavor, though in most simple form, to introduce legislation with the object of keeping municipal accounts upon a uniform basis. In 1897 an act (Chap. 228, R.S.O.) was passed which provided for the maintaining and keeping of Cash Receipts and Cash Disbursements of all villages, townships, towns and counties, and cities (under 15,000 population), in a uniform way. True, this was only a first step, but it was nevertheless a step in the right direction, coupled as it was with the appointment of an official known as the Provincial Municipal Auditor, included in whose duties was the constant visiting of municipalities, explaining changes in method, checking up cash balances, etc. The actual as well as the moral effect has been good.

The further provision for investigations by independent and competent municipal accountants, upon petition of a reasonable number of ratepayers, has been most beneficial. In almost all the petitions so filed, charges of a general and sometimes of a specific character were made. The investigations have usually shown that very few of the specific charges ever stood the test of a critical examination under oath, and consequently these fell to the ground. The audits have, however, almost invariably produced results by showing either embezzlement, errors, omissions or other wrongdoings, of the existence of which the petitioners and ratepayers generally never dreamed.

Upon general principles, therefore (although upon the surface there may not appear to be the slightest justification for the circulation of a petition), the granting of the prayer of the petitioners for an audit is justifiable. If the audit and examination be properly conducted, by a competent person, in whom the government and people have confidence, his report will have the effect of removing suspicion, where suspicion has unjustly existed, of clearing up matters which have been the "bone of contention" at municipal elections for years; of locating and pointing out errors and wrongdoing, if they do exist, and of clearing the municipal atmosphere generally.

While the legislation thus far introduced has proven of great value, it yet falls very short of what ought to be accomplished before the Province of Ontario may consider that it has its municipal accounts in such condition as will permit of their being looked upon as a model system.

The provincial statutes provide for the keeping of a cash book and a journal, with no reference to a ledger. The situation is about as crude as it well could be in this respect.

A complete system of municipal accounts requires a method or means whereby all of the financial transactions and all of the data pertaining to the financial management of the municipality is (1) collected, (2) classified, and (3) finally summed up in the form of a Balance Sheet, which represents, on the one side, all of the assets, and on the other side all of the liabilities.

The accounts of an individual year should include all known liabilities, irrespective of whether or not warrants or orders have been issued therefor, and the whole revenue from taxation and other sources, applicable to the year, irrespective of whether or not it has been actually collected. By such a system only, of reporting expenses and revenues, can accurate information be had as to the relation of service rendered and to expenses incurred. Mere statements of Cash Receipts and Cash Disbursements have no reference to service rendered, unless every bill has been paid, and every dollar of revenue has been collected.

I venture the statement that in not a half-dozen municipalities (including our cities) are their accounts kept upon the Balance Sheet system. The most that is found is a simple statement of Cash Receipts and Cash Disbursements, supplemented by statistics and statements which will show possible assets and liabilities, these being generally gathered from sources altogether outside of the books of account.

Within the limits of a short article such as this, it would not be possible to discuss the broad question of Municipal Accounting in such a way as to impart detailed information which would prove of much benefit. Under these circumstances it were better, perhaps, to content oneself with pointing out some of the weaknesses in present methods, and suggesting improvements therefor.

It is well understood that the ordinary annual audit of municipal accounts is merely a perfunctory operation and amounts to very little. The auditor will reply that the service rendered is worth as much or more than the price paid. That is true, but it is no excuse for work poorly done to say that the work fitted the pay. Service should never be rendered upon such a basis. The conscientious auditor, who realizes the responsibility which he assumes, will decline to accept the position, unless the fee be made sufficiently liberal to cover a full, complete and searching investigation of the affairs of the corporation.

Not the most important duty of the auditor is to detect fraud and wrongdoing; he should find these if they exist, but his whole duty is to see

(a) That the monies or sums to which the municipality is entitled are accounted for, either as a receipt, or as an asset;

(b) That the funds on account of which monies are collected have received the proper credit;

(c) That all expenditures of the municipality have been made according to the statute, by-law or resolution authorizing them, and out of the proper fund;

(d) That no improper and illegal expenditures have been made, or if so that they be reported;

(e) That the accounts of the corporation are being so kept as to properly exhibit the financial or other condition of the municipality;

(f) And if not, that recommendations be made, which, if enforced, will bring about the required improvements.

A serious weakness in all municipalities is the absence of a full and comprehensive form of by-law for striking the rates. The details in the average by-law as now drawn are altogether too meagre. A properly drawn by-law should include (as an appendix or otherwise) the estimates which it is intended to provide for, in fullest detail. Further than this, the by-law should include in detail, divided as between the proportion to be raised out of general taxes and as a charge against the several properties affected, a schedule of all rates to be collected on account of local improvements, including the number of the by-law under which authorized, the number of the levy, and the levies yet to be made.

A schedule should be included showing in detail the "arrears of taxes" to go on the roll.

Provision should also be made for the including in the by-law, in detail, of all other items which should find a place upon the Collector's Roll.

With a by-law such as this before him, the auditor ought to be able to establish the accuracy or otherwise of the Collector's Roll. It would surprise the readers of the Contract Record if they could only know the amount of money lost to municipalities through inefficiency in the matter of imposing these special rates.

The interests of municipalities would be further safeguarded if at the date of settlement and transfer of the Collector's Roll with the Treasurer, a joint report be made in the form of a statement showing

(a) The total amount of taxes on roll (including interest added);

(b) The total amount of taxes collected in cash;

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(c) The amount (in detail) written off or allowed by Council; and

(d) The amount of uncollectable taxes returned to the Treasurer as per the "return of uncollected taxes." The sum of these (b, c and d) should exactly equal the total of the roll (a).

The statement should recite that the Collector had paid over or returned to the Treasurer the above mentioned sums, and that the Treasurer had received and entered in his accounts the cash he received, and had credited the Collector with the other items (c and d). Right in this particular exists one of the most serious weaknesses of present municipal accounting methods.

Another source of trouble is the permitting of two or more rolls in the hands of a collector of taxes at one and the same time. A serious temptation is thus placed in the way of a weak or dishonest official, and where trouble follows, the members of council who have allowed such a condition to arise should be held personally and individually responsible.

Arrears of taxes are, under present methods, less susceptible of proof than almost any other form of receipts. In the majority of municipalities, no record or ledger account of such arrears is kept, and in this particular department of municipal accounts exist one of the most prolific and frequent sources of peculation, for the reason that there is absolutely no means of check upon the dishonestly disposed official.

In these and other matters relating to municipal accounting methods there is room for much improvement, and very much could be done toward remedying the existing weaknesses by the introduction into the Municipal and Assessment Acts of such amendments and schedules as would provide a simple system of report as between urban, local and county municipal officials, and as between these officials and their councils. These very necessary changes cannot be brought about by the introduction of fragmentary amendments to the several Acts. The legislation should, instead, submit those portions of the several Acts having to do with the accounting methods of municipalities, to a commission of Chartered Accountants, men of known and undoubted experience in the matter of Municipal Accounts, who would prepare for submission to the Municipal Committee such amendments, changes and additions to the Acts as would, if made law, go far toward rendering more difficult, if not impossible, the possibility of peculation and wrongdoing by municipal officials.

The Balance Sheet or Asset and Liability Statement as ordinarily found includes in a more or less mixed condition available and fixed assets upon the one hand and floating and bonded liabilities upon the other.

A properly constructed Balance Sheet should be divided into two parts: the first section should show the financial position of the municipality, having regard to current assets upon the one hand, and to the liabilities, which are a charge upon these assets, upon the other. If the current assets exceed the liabilities (with proper provision for loss upon realization), then the remaining balance may, and should properly, be taken to account in the preparation of the estimates of the succeeding year, and would make for a reduction in the rate of taxation.

Upon the other hand, if the current and floating liabilities requiring to be met out of the available assets exceed the amount of such collectible assets, then the excess of liability becomes a deficiency, which should be included in the estimates of the succeeding year, as a sum to be provided for, with a resultant increase in the tax rate.

As is well known, however, and, unfortunately, members of council are prone to omit from their estimates the liabilities of their predecessors in office, and these are allowed to accumulate until such time as they become unbearable, when recourse is had to special legislation for permission to consolidate the floating indebtedness and provide for it by a special debenture issue.

Specification for Municipal Balance Sheet,

Analysis and Classification.

Revenues and Disbursements.

- **Revenue**
  - **ORDINARY:**
    - Cash on hand and in Bank
    - Taxes, divided as to years
    - Licenses
    - Schools, divided as to Public, High and Separate
    - Water Rates
    - Electric Light
    - Franchises
    - Fines and Fees
    - Rents
    - Interest
    - Other Sources
  - **EXTRAORDINARY:**
    - Loans, Current Account
    - Debentures, General
    - Debentures, Local Improvement
    - Sinking Fund
    - Sinking Fund Interest
    - Other Sources
- **Expenditure**
  - **ORDINARY:**
    - Salaries
    - Waterworks
    - Electric Light
    - Grants and Charities
    - Board of Works
    - Fire
    - Administration of Justice
    - Police Department
    - Health
    - Parks
    - Market
    - Library
    - Schools, divided as to Public, High and Separate
    - Printing, Advertising and Stationery
    - Interest
    - Rebates and Allowances
    - Contingencies
    - Other sources
  - **EXTRAORDINARY:**
    - Loans, Current
    - Debentures, General
    - Debentures, Local improvement
    - Interest—General Debentures
    - Interest—Local Improvement Debentures
    - Sinking Fund
    - Public Works in progress
    - Local Improvements in progress
    - Other Sources

Assets and Liabilities.

- **Assets**
  - **Active**
    - Cash on hand
    - Cash in Bank
    - Taxes
      - Current
      - Arrears
    - Water-Rates
    - Light-Rates
    - Rents
    - Advances, Public Works in progress
    - Advances, Local Improvements in progress
    - Other Advances
  - **Reserve**
    - Sinking Fund, General
    - Sinking Fund, Local Improvements
    - Special Trust Funds
  - **Fixed**
    - **NECESSARY INVESTMENTS.**
      - Waterworks System
      - Electric Light System
      - Fire Halls and Apparatus
      - Market
      - School Buildings and Equipments
      - City Hall and Furniture
      - Public Library
      - Public Park
      - Real Estate
      - Hospital
      - Public Works Equipment
      - Other necessary Investments
    - **SPECULATIVE INVESTMENTS.**
      - Stock in Railways
      - Stock in Gravel Road Companies
      - Other Speculative Investments
  - **Passive**
    - Bridges
    - Sewers
    - Pavements
    - Bonus Account
    - Local Improvements
- **Liabilities**
  - **Bonded**
    - Debentures, General
    - Debentures, Local Improvement
  - **Floating**
    - Debentures, due and unpaid
    - Coupons, due and unpaid
    - Loans, Current
    - Loans, Local Improvement, in progress
    - Accounts payable
    - Other Indebtedness
  - **Capital**
    - Surplus of Assets over Liabilities

Designed by F. H. Macpherson, C. A.

In these and other matters relating to municipal accounting methods there is room for much improvement, and very much could be done toward remedying the existing weaknesses by the introduction into the Municipal and Assessment Acts of such amendments and schedules as would provide a simple system of report as between urban, local and county municipal officials, and as between these officials and their councils. These very necessary changes cannot be brought about by the introduction of fragmentary amendments to the several Acts. The legislation should, instead, submit those portions of the several Acts having to do with the accounting methods of municipalities, to a commission of Chartered Accountants, men of known and undoubted experience in the matter of Municipal Accounts, who would prepare for submission to the Municipal Committee such amendments, changes and additions to the Acts as would, if made law, go far toward rendering more difficult, if not impossible, the possibility of peculation and wrongdoing by municipal officials.

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of instances the financial statements prepared for the guidance of the estimators are absolutely unintelligible upon this point, and councils have the ready excuse that the true position was not pointed out to them.

I furnish herewith a model form of Balance Sheet, which can be recommended as fulfilling the requirements suggested in the foregoing remarks.

Windsor, Ont., February 10, 1906.

BRINGS RESULTS.

An architect in a Western Canada city who inserted a transient advertisement in the CONTRACT RECORD writes us as follows: "There were upwards of thirty-five replies from the Atlantic to the Pacific, and from some of the most out-of-the-way places, which shows conclusively that your paper has the circulation."

The B. C. General Contract Company, Vancouver, B.C., are busy with the completion of the Pitt River bridge foundation, which will be finished, it is expected, in June. The same company also have the contract for the erection of three steel spans near Glacier for the C.P.R. and for the concrete foundation for the Pacific Coast Lumber Company's new burner.

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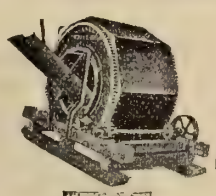
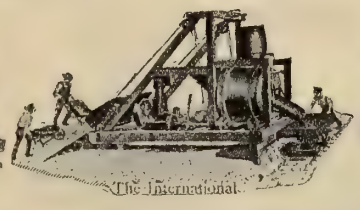
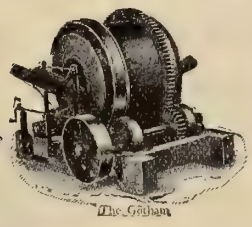
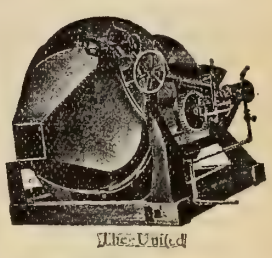

The Stanley


The International


The Gotham


The United

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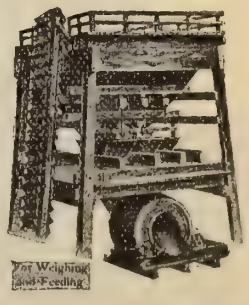
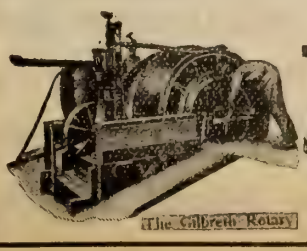
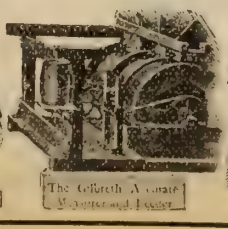
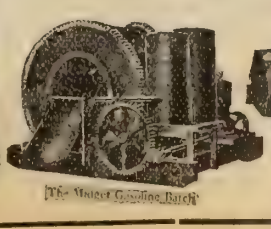

For Weighing and Feeding

Portable Gravity


The Gilbreth Rotary


The Gilbreth Automatic Measuring and Feeder

The Cubical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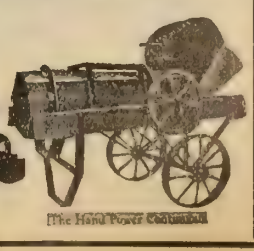
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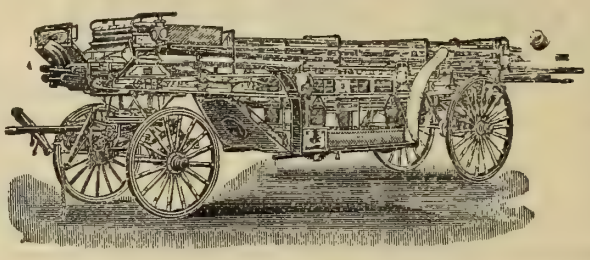

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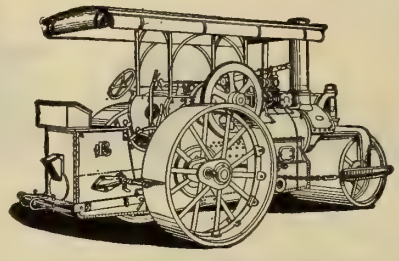

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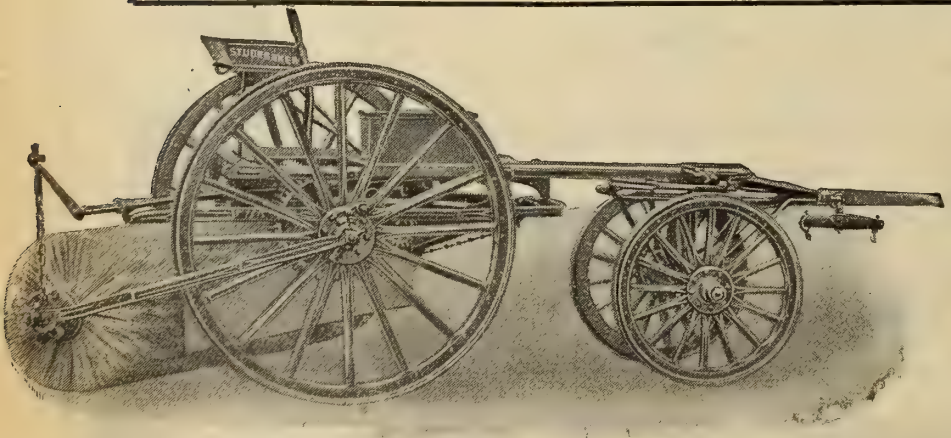

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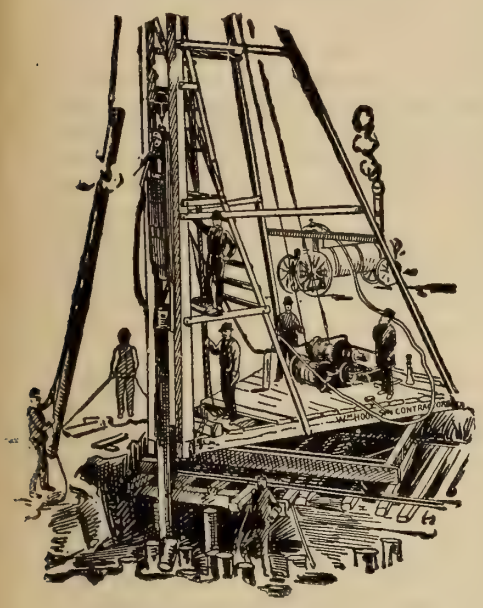

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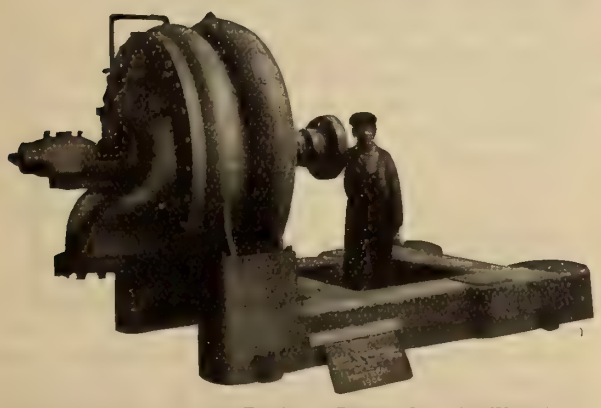

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ROADWAYS AND PAVEMENTS

By C. W. Dill, A. M. Can. Soc. C. E.

When a town or city first begins to think of street improvement and paving work, naturally certain matters present themselves for consideration, and as these are of much importance in the solving of problems presented, it is well that they should be thought out carefully before committing any corporation to a hap-hazard scheme which would not be in harmony with the future growth or requirements of that corporation.

The first requirement is the preparation of a suitable by-law under which local improvements may be carried out. This by-law should determine the rights of the corporation as well as those of the individual ratepayers on any street to be improved, should state the proportion of the cost of the improvement to be borne by the corporation at large, should deal clearly with the methods of securing needed improvements whther by petition of the ratepayers or on recommendation of the proper civic authority, and should give in detail everything relative to annual payments and other matters dealing with the relations between the corporation and the individual ratepayer.

The second requirement is the selection of proper engineering advice to guide the corporation in laying out some comprehensive scheme of street improvement, especially in advising as to the most suitable classes of pavements for streets under different and varying conditions of traffic, influences of weather, width of street to be paved to suit traffic conditions, grades, etc.

The present tendency is to permit agents of certain classes of pavements to circulate petitions which dictate the class of pavement, the width of roadway, the cost to be charged, etc., and a town or city unless properly advised finds itself going ahead under this system with nothing to guide it except the interested motives of those circulating petitions for this or that special form of pavement, and finds out the mistake when too late to apply a remedy except at a heavy cost.

CLASS OF PAVEMENT.

Small cities and towns are of necessity restricted in the selection of the kind of pavement to be used. Pavements requiring the use of expensive plant if laid at all are laid at a proportionately high cost, due to the high charges of moving plant, etc., and the question of repairs is one of serious moment. This restricts the selection to some material which is obained locally and can be constructed at a reasonable cost, or to the use of paving materials which may be laid without the use of a costly plant and which may be repaired without trouble or undue cost. Pavements of this class are ordinary macadam, tar macadam, brick, treated wood blocks and asphalt blocks, the class of pavement to be used depending on the cost, the nature of the traffic, percentage of grades on the street and other local conditions to be decided upon and which may have a bearing on the future condition of the corporation if marked changes in growth and traffic conditions may be expected.

PLANS AND SPECIFICATIONS.

Having decided upon the class of pavement for a certain street and this pavement having been recommended in the proper way and the favorable verdict of the interested ratepayers been given, proper detailed plans and specifications, having relation to local conditions, should be prepared before tenders are asked for. Frequently a corporation, to save expense or to avoid injuring the feelings of an inexperienced official, will advertise for tenders on a specification copied in its entirety from some neighboring city, and with no data given by plan or otherwise which will enable a contractor to tender in an intelligent manner. The result is usually that someone relying on his ability to interpret things in his own way secures the contract and the work is done in a manner not intended, but which could have been avoided by a proper regard to details at the proper time.

The plan, with accompanying profile, should indicate clearly the extent of the work to be done, give all lengths, widths, extent of street intersections in plain figures, and the location of all manhole and street gulley tops and other matters necessary to a full knowledge of what is required. The profile should denote the existing ground surface with the proposed finished surface of the pavement with elevations of each at frequent intervals to enable a "bidder" to accurately estimate the amount of excavation to the sub-grade of the pavement. A cross-section of the pavement should be shown, giving details of the construction of the curb, gutter and pavement, the amount of crown of the surface and other matters of value. All these should be made supplementary to the specifications, so that no conflict of opinion may arise in the carrying out of the work whether the tender be a lump sum price for the whole work or unit prices for various portions of the work.

Many specifications carry a clause stating that intending bidders must satisfy the corporation that they are competent by previous experience, and in other ways, to carry out the contract if awarded to them. In many cases this clause, though of much importance, is of no value whatever, as local influences frequently prevail and an entirely inexperienced contractor is given work involving the expenditures of large sums, and the result is constant worry and friction for the engineer, and if the progress be slow or the contractor find he has not tendered intelligently and because of losing money throws up the contract, there is nothing to be done but to let him down easily, because the corporation has nothing to realize on. This adds to the expense to the ratepayers and many times proves that the lowest tender is not cheaper than an intelligent tender from an experienced contractor who has built up a reputation for good work and who will carry out his obligations after entering into a contract.

Many cases may be cited where an engineer's estimate of work has been thought to be much too high because of irresponsible tenders, and it is well to be careful before entering into such contracts which may after all be detrimental to the interests of the corporation, for if the work be done without a loss to the contractor, it is at the expense of good lasting work by an attempted use of inferior materials and impoverished concrete, etc.

MACADAM ROADWAYS.

Naturally, with so much suitable rock within reasonable distance of our towns and cities, macadam roadways are common, and when properly constructed meet the demands of ordinary traffic where cleanliness and the absence of dust are not too essential. These roadways, whether designed for light or heavy traffic, should be constructed of such a thickness as to be permanent, with proper care in keeping the wearing surface in good repair. This requires a thickness of not less than 10 inches for light traffic roads and 14 inches for heavy.

The surface of the completed roadway should be well crowned to permit the rapid carrying off of water and to insure a quick drying out of the travelled surface. The sub-soil should be well drained so as to keep the pavement dry, as a soggy roadway will cut into ruts and get out of repair quickly. The wearing surface should consist of stone broken to a size small enough that will enable the stones to "bed" properly and not be dislodged as readily as is the case with larger stone. This surface stone should be "blinded," preferably with small stone chippings and stone dust rather than with gravel or sand, as is usual. These roadways are naturally very dusty, and unless repeatedly sprinkled are most objectionable on business streets or on streets leading to business streets. Attempts have been made to get over this difficulty by the use of oil for sprinkling instead of water, and under certain conditions has been fairly successful. The cost, however, is too great, and a much preferable method is to overcome

the difficulty by the use of tar macadam roads. These are constructed with the same kind of base, etc., as for ordinary macadam, but the surface or wearing coats or layers have a tar and paving pitch cement mixed in certain proportions and under certain variable conditions to meet the special case being dealt with. Much greater care is needed in grading the stone as to secure a mixture with the minimum of voids so as to form as nearly as possible a perfectly cemented mixture. This when properly rolled makes a smooth waterproof surface which can be readily cleaned and thus remove to a certain extent the objection because of dust. These roads have not, however, been a success on business streets or on streets subjected to any degree of heavy traffic, which streets require a surface which combines smoothness, cleanliness, a good foothold for traction purposes, a moderately permanent wearing surface, and of such material as will admit of easy and economical repair. In cities this is best met by using sheet asphalt, but in smaller cities and towns which have no permanent paving plants the preferable materials are brick, treated wood blocks and asphalt blocks. These all have similar foundations and differ only in the treatment of the wearing surface material.

BRICK PAVEMENTS.

A good brick must be tough enough to resist wearing, but not brittle enough to chip under the concussion of horseshoes or grind under heavy traffic. It must also be close grained and compact and sufficiently annealed to prevent any appreciable absorption of water, an excess of which would rapidly disintegrate the brick in the process of freezing and thawing and also in making the brick soft and liable to crush under traffic. These brick should be of the largest size which will permit of the proper burning and annealing in the making so as to not leave unburnt centres which will absorb too much water. They should be made with proper contrivances to ensure a uniform spacing in laying so as to permit sufficient grouting to be used to make a united surface and should be true and even on the surface to ensure as noiseless a pavement as possible. A brick pavement has many advantages in being sanitary, easily cleaned, affording a good hold for traffic purposes, being readily repaired and being moderately cheap. It is, however, noisy and, unless properly laid and grouted, the bricks "cobble," and the wear and noise increase very rapidly and the pavement is soon destroyed.

WOODEN BLOCKS.

Treated wood blocks are used very generally in many English and European cities, but, curiously, not here, mainly because of the lack of suitable wood near at hand and also because of the lack of experience with reference to this special class of pavement. When properly selected, treated with a good preservative and laid with care, this is almost an ideal pavement, as it combines most of the good features of the brick without the objectionable ones. The great drawback is the unsanitary conditions liable to arise if not properly kept clean, and this is no fault whatever of the pavement, but of its treatment. At present the cost is rather high, but it seems strange that some suitable Canadian wood cannot be secured to answer the requirements necessary for this class of roadway.

ASPHALT BLOCKS.

Asphalt blocks have had a varied experience, due entirely to the imperfect methods of making the blocks. These are made of a mechanical mixture of small stone chips, sand, dust and an asphalt cement, the block being moulded and subjected to a very strong pressure while the materials are hot, similar to the rolling process of a sheet asphalt pavement, one being done at a factory and the other on the street. There is no reason why the blocks should not be satisfactory if properly and carefully made, and the resulting pavement has many good features and combines practically all those of the brick and treated wood blocks. The only drawback is the liability to rot under conditions of undue moisture, which difficulty can, however, be easily removed by seeing that the surface is even and has a proper amount of "crown" and "grade" to quickly drain off the water and prevent any trouble from moisture.

All of these three pavement surfaces are not laid directly on the concrete foundation, a cushion coat being supplied for the purpose of permitting the blocks to be rolled to a true, even surface, and also to prevent any sudden concussion or heavy concentrated load from crushing individual bricks or blocks resting on the hard, uneven concrete surface.

The spaces between the bricks are filled with a cement grout to prevent water causing trouble and to keep the blocks tight in place to prevent chipping and undue wear.

With wood blocks and asphalt blocks a sand filler seems to be preferable because the traffic hammers or beats down the surface of the blocks and a more uniform homogeneous surface is secured than when a cement filler is used which would isolate each block from those surrounding it.

All of these pavements described are suitable for business or residential streets under all conditions of traffic, the only difference being the treatment of the foundation to bear heavy or light loads as the case might be.

But no pavement will be a success unless it be constructed on sound engineering lines and principles and is properly cared for after its completion. A proper attention to cleanliness and repairs will aid in maintaining a roadway in good condition which would rapidly fail with neglect.

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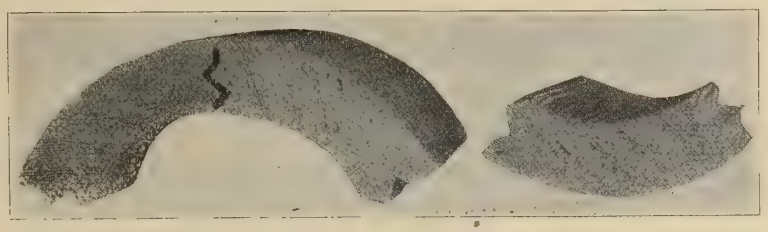
Note the construction of the staves, with our Patent **"Perfect Double 'V' Joint"**, ensuring perfect matching of the staves, as there are five plane surfaces which meet accurately.



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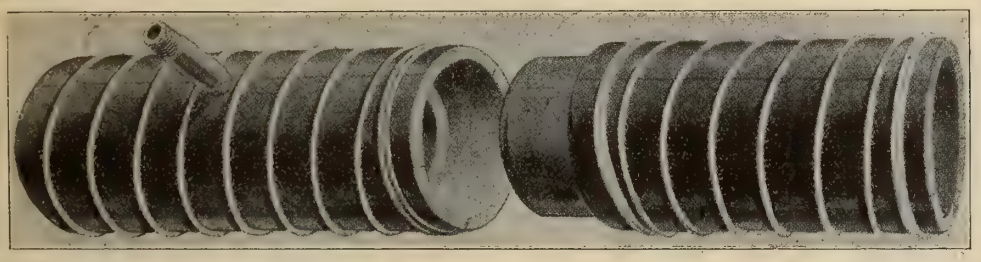
Both Inserted Joint and Wood Sleeve Couplings are used in connecting the pipe. The machine-banding is done under such tension that the staves appear almost as if but one solid piece of timber were used.



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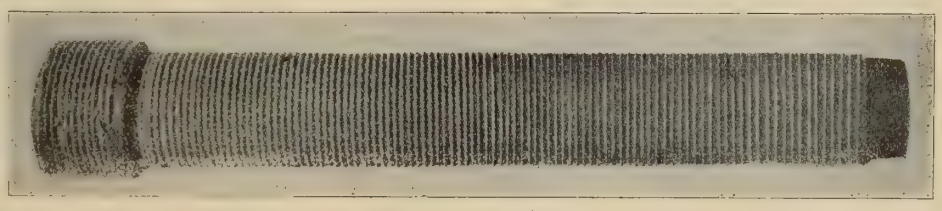
Inserted Joint Coupling, Showing Method of Connecting Service Pipe.

The spacing of the wire is based on the pressure under which the pipe has to serve. **In all cases a safety factor of five, at least, is provided.**



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ELECTRIC LIGHTING OF A SMALL CITY OR TOWN

By F. A. Cambridge, City Electrician, Winnipeg.

The lighting service of a small city or town is often a more difficult problem than that of a larger one, partly for the reason that usually the business or "load" of the plant is very scattered; the amount to be expended on street lighting is limited, and there appears little prospect of a satisfactory day load being forthcoming. For these reasons the standing charges of the plant are apt to be higher in proportion to the connected load than in the case of the larger city.

At the outset the writer would affirm that whether the plant is to be a municipally owned, or privately controlled, one, the services of a thoroughly competent and disinterested consulting engineer should be retained, and his advice acted upon—not simply in the first layout, but also in subsequent extensions or enlargements of any moment. It rarely comes about that the powers that be, whether municipal councils or boards of directors, will, in a plant of this size, engage and retain the services of a man as manager or superintendent, thoroughly competent to deal with all problems of both a business and mechanical or electrical nature—consequently through false economy a "cheaper" man is placed in charge, and in too many cases the plant appears in a few years' time a thing of shreds and patches—costly experiments and mistakes having been carried out and no set plan or purpose followed.

The design of the plant in a growing town should be such that it can be enlarged from time to time and yet retain evidences of more forethought than afterthought—the building of such a design that its symmetry and usefulness will not be impaired or destroyed—ample room having been obtained at the outset not only for the building and its inevitable enlargement but also for storage and other purposes. The type of apparatus to be installed, also the size of the units, the voltage to be carried, these should all be considered from the standpoint of future growth as well as present efficiency. In a plant of this size with the amount of money and business available "scrapping" is apt to be a more serious consideration than in the larger city.

It will in the long run be found desirable for all parties that as steady a load as possible be placed upon the plant—with this in view the matter of furnishing power for pumping the town water supply is well worth considering. The success of motor driven centrifugal or multi-stage rotary pumps is established, so that the operation of the pumping system from electric power will usually be found advantageous. In the case of a privately owned plant the town should not only be able to contract for power at a favorable rate but should also be able to make better terms for street lighting. The furnishing of a day load is not only of advantage to the plant but is a convenience to the citizens, and if the merits of electric power for numerous industries are duly set before the public, manufacturing is encouraged and growth assured in many directions. If the pumping is a direct system the operation of the units for the ordinary domestic pressure can be operated and their consumption of current measured. For a fire pressure a centrifugal "booster" driven by a separate motor can be applied, the current for which can be separately metered. Or, a rate per million gallons pumped could form the basis of charge.

In the case of a municipally owned plant it will usually be found advantageous to combine the water and light plants in the one building, particularly if a steam plant is installed. In this case the building should be fireproof throughout, the boiler, engine and dynamo rooms separated by suitable division walls, and the dynamos and switch-boards and other electrical apparatus installed on a higher level than the water plant, so that in case of any accidental flooding no damage would be likely to be caused to the former.

Should the town favor the granting of a franchise to a company or individual, the contract for power and street lighting should be for not less than a term of five years. No one should expect as favorable a rate under a short term contract as one having reasonable duration. Street lighting apparatus is special and cannot be used for any other purpose after the contract is taken away. A clause should be inserted, however, that "in case the maximum number of lights is increased at the expiration of ..... years beyond the number now contracted for, the town should be entitled to a reduction in the price per lamp per night." In this way one of the benefits of decreased cost of operation as the load increased would accrue to the town, and in this way would stimulate the installation of additional lamps and a more liberal appropriation for street lighting.

As to the system of illumination for street lighting—the business streets should be lighted by arc lamps, also any bridges, railroad crossings and the like. For residence streets and infrequently travelled roads 32 c. p. or 50 c. p. series incandescent lamps will be found to be a satisfactory illuminant. By their use a given appropriation can be made to give reasonably good lighting over a larger area than if arcs only are used. The lamps spoken of should not be confounded with the ordinary incandescents so often seen and so seldom giving effective results. The writer has had in operation a number of the above lamps for a considerable period and has found their use most satisfactory.

The installation of the constant current transformer fed from the constant potential alternating generators will usually be found to furnish a satisfactory medium for arc lighting—the closeness of their regulation enables the plant to operate both series enclosed arcs and series incandescents on the same circuits with excellent results.

Regarding a schedule for street lighting—in a town of this size a Moonlight Schedule is usually ample. If the town is operating the plant considerable economy can be arrived at by operating in this way; shutting down for an increasing number of hours as the moon nears "full," with little or no lighting for a night or two each side of full moon and shutting down after that when moon is well up for a number of nights, will furnish very fair service (if administered with discretion). The station operators, however, should keep a lookout for heavy clouds and start up, otherwise constant complaints will come in. If the plant is a private one, the town might with profit arrange a contract on the basis, of, say, 3000 hours of lighting for the year, following a schedule similar to above. In this case an officer of the council should be empowered to order lights on at any time. The hours run could be checked by Bristol recording ampere meters in each circuit and any deductions or extras allowed at the year's end. With other suitable provisions as to outages, etc., the above should form a satisfactory form of schedule.

Whether the plant is municipally owned or not, nothing but a meter system as a basis of charge for commercial and domestic service should be thought of. The smaller plants are too apt to begin operating with a flat rate system of charges, and when the inevitable day comes when the meters have to be used a great deal of dissatisfaction is brought about which would have been avoided by adopting a more sane method at the start. Considerable study should be given to the matter of rates and discounts, as all business is not of the same value to the plant.

If the plant is to be operated by the town, the entire system should be placed in charge of a competent man—not only from an electrical standpoint but also from the business point of view. He should be given an absolutely free hand in the employment of his help and their discharge, and whether he is responsible to a board or committee or to members of a commission, he should have something to say in the awarding of all contracts. All suggestion of politics should be rigidly excluded and every encouragement given to men who show a disposition to perform a little more than their duty. Complete and reliable records and account should be kept of all details of operation and expenditure, and every item rightly chargeable debited to the lighting system. If this is done there will be less question as to actual cost of operation.

In reference to the much discussed matter of depreciation, the writer would prefer, in the case of municipal plants, to have a fixed percentage set aside each year and placed to the credit of the plant, out of which repairs and replacements could be cared for. If there is a bond issue with sinking fund set aside annually, this will usually take care of any reasonable depreciation through obsolescence. The above is, it is believed, more satisfactory than taking care of repairs and replacements as they arise—spasmodically—which is apt to throw an undue burden on the plant at intervals—possibly little at the beginning and inevitably more later on. In some municipally owned systems this percentage is added yearly to the actual cost, in others it is not shown at all, but repairs and maintenance charged up to the operating account. In others due provision is made for sinking fund payments, while in others the capital expenditure is not raised by debentures but is provided out of current revenues. The writer believes the method suggested would prove a satisfactory way of dealing with the question, but in many instances the financial arrangements of towns or cities do not allow of any credits being carried over from year to year, making it necessary for those in charge to smooth out the peaks of the financial load by endeavoring to meet these expenditures in as systematic a manner as possible.

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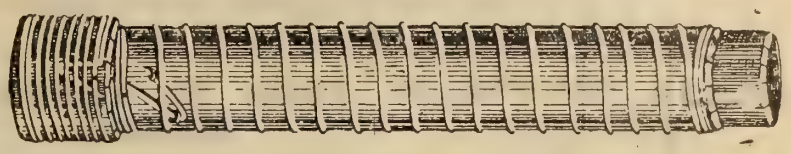

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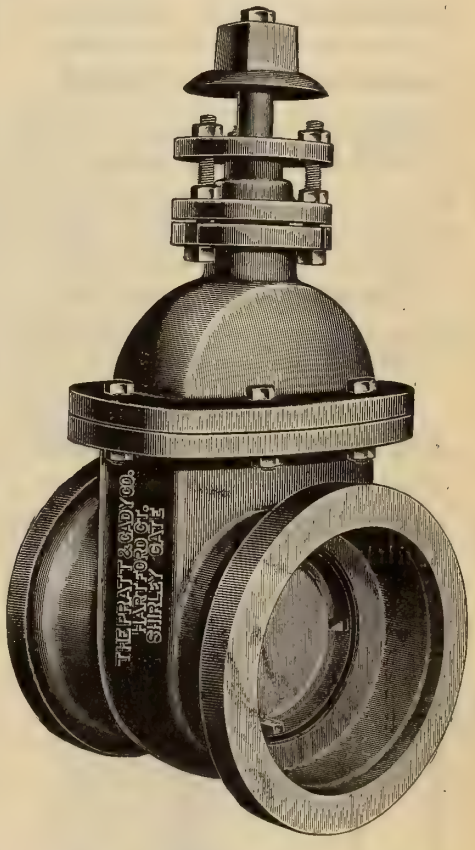

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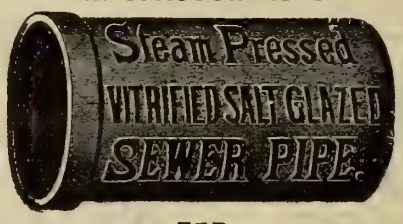

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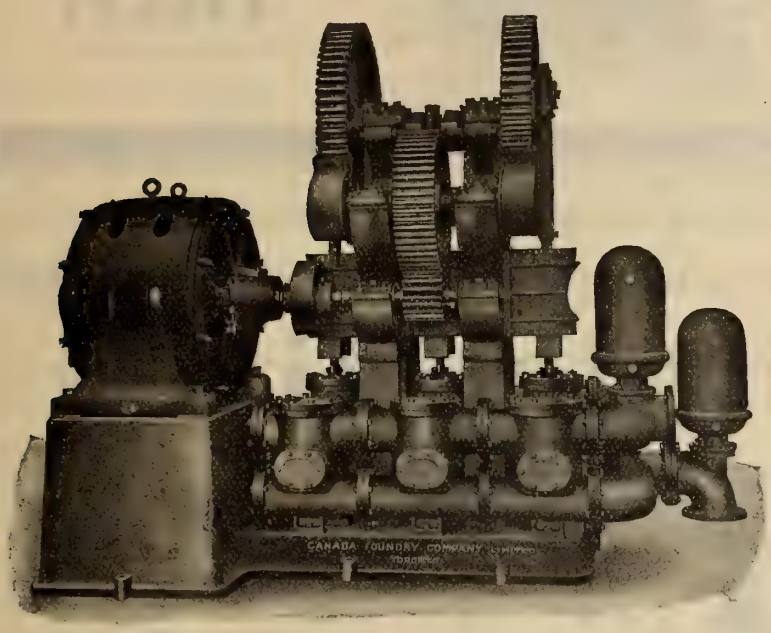

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All styles and sizes for all duties.

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C. G. E. Motor Direct-Connected to Double Acting Triplex Pump.

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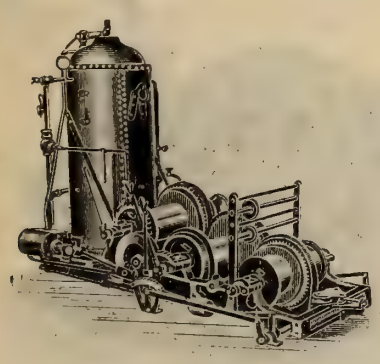

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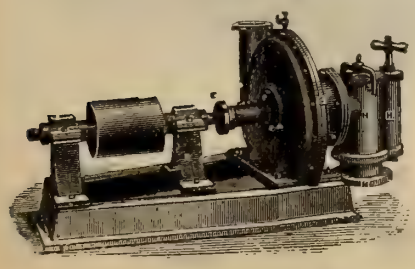

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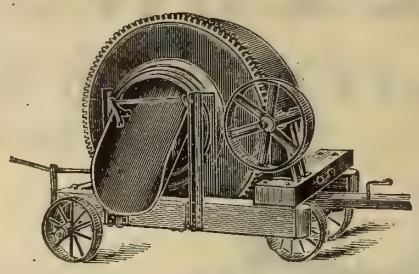
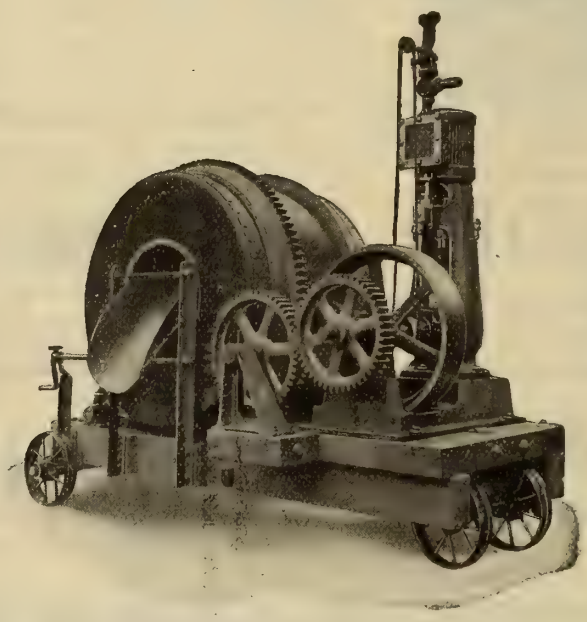
PLAIN  TALK

—We don't know much about writing advertisements—

But we DO KNOW that we have the simplest and most up-to-date

Concrete Mixer

on the Market



1906 Model Ransome Mixer. Note Heavy Gears.

We Know that our machine is easy to operate and the discharge arrangement is perfect.

We Know you can save the labor of three extra men by installing a Ransome Mixer.

We Know the concrete turned out is unexcelled for strength and uniformity.

We Know that you can save money on the original cost.

We Know our machine and we are ready to guarantee it to be perfect in workmanship and action.

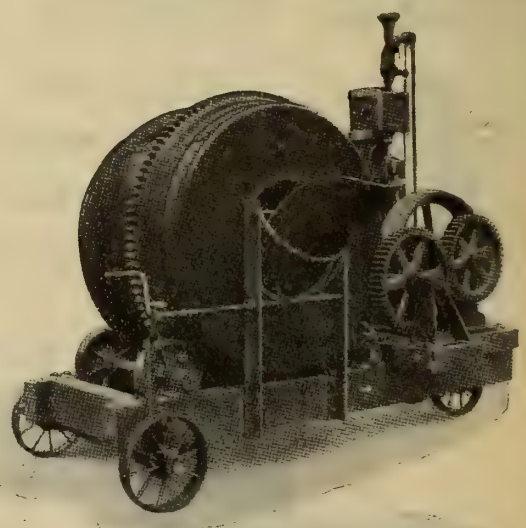
You Run No Risk

MIXERS SUPPLIED

With or without power.
All capacities.
On skids or trucks.

LET US HAVE YOUR ENQUIRY

Catalogue and particulars on request



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A Weekly Journal of Public Works, Tenders, Advance Information and Municipal Progress

This Paper Reaches Every Week the Town and City Clerks, Town and City Engineers, County Clerks and County Engineers, Purchasers of Municipal Debentures and Leading Contractors in All Lines Throughout Canada

VOL. 17. TORONTO, MONTREAL — MARCH 21, 1906 — WINNIPEG, VANCOUVER No. 3

THE CANADIAN CONTRACT RECORD
PUBLISHED EVERY WEDNESDAY

As an intermediate Edition of the Canadian Architect and Builder.

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CITY OF MOOSE JAW

TENDERS FOR

BORING WELL for GAS, WATER or OIL.

The Corporation of the City of Moose Jaw will receive sealed tenders, marked "Tenders for Gas Well," up till MONDAY, THE 26TH DAY OF MARCH, at 5 o'clock p.m., for the boring of a well on the following conditions, viz:

The City to supply the site, water, and all pipe and casing necessary for the construction of the said well. The contractor to supply the entire plant together with fuel necessary for said construction, and to oblige himself to carry a six inch drive pipe to a depth of not less than 1000 feet.

The tenders to be at a given price for the following depths: 1000 feet; 1200 feet; 1400 feet; 1600 feet; 1800 feet and 2000 feet.

The City reserves the right to stop the work of drilling should a supply of gas be found in quantities to satisfy the City before the depth contracted for has been reached.

Each tender must be accompanied by a certified cheque drawn upon any chartered bank of Canada, payable to the order of the City of Moose Jaw, for the amount of $500, which shall be forfeited should the Contractor fail to enter into a satisfactory contract when notified so to do.

The Council reserve the right to reject any or all tenders. For full particulars as to above, as well as terms of contract, apply to

JOHN D. SIMPSON,
Secretary-Treasurer.

Moose Jaw, 28rd February, 1906.

TENDERS

Sealed tenders, addressed to the undersigned, will be received until noon on THURSDAY, THE 29TH INST., for the construction of the necessary artificial stone sidewalks, curb and gutter to be constructed in St. Thomas during the current year. Plans and specifications to be seen at the office of the undersigned. A certified cheque payable to the City Treasurer for the sum of One Hundred Dollars ($100.00) must accompany each tender; this to be returned when the successful tenderer enters into a contract with the city. The Committee reserve the right to reject any or all tenders.

JAS. A. BELL, City Engineer,
St. Thomas, Ont.

TENDERS FOR STEEL BRIDGES

Sealed tenders will be received by the undersigned up to noon on MONDAY, APRIL 9TH, for the erection of a 90 ft span, 14 ft. roadway, Warren truss steel bridge over the Teeswater river, side line 5 Township of Greenock, and also for the erection of of a 110 ft span steel bridge over the Teeswater river, con. 8 Greenock. Floor of bridges to be 4" cedar. Bridges to be so constructed and of sufficient strength that concrete floor may be put on. Parties tendering are required to submit plans and enclose marked cheque for 10% of amount of tender. Tenders will be considered by Township Council at Chepston on April 9th.

J. J. DONNELLY,
Clerk Township Greenock,
Pinkerton P. O., Ont.

March 14th, 1906.

Tenders Wanted

Sealed tenders will be received by the undersigned up to eleven o'clock a.m., of SATURDAY, APRIL 14TH, 1906, for the erection of a Presbyterian Church at McDonald's Corners, to be built of cement concrete blocks.

Plans, specifications, etc, may be seen and all other information obtained at the office of Henry P. Smith, Architect, Kingston, Ont., and at the office of John G. Barr, Merchant, McDonald's Corners, Ont.

Tender may be made for the whole work or for separate portions and must be accompanied by a marked cheque for 5% of the amount of tender, which will be returned in case of non-acceptance.

The lowest or any tender not necessarily accepted.

WALTER GEDDES,
Secretary of the Committee,
Dalhousie Lake, Ont.

TENDERS FOR

Cast-Iron Pipe and Laying Water Mains

Notice is hereby given that the time for receiving tenders for the supply of cast-iron pipe and for laying water mains is extended from the 20th of March until Tuesday, the 3rd of April.

EMERSON COATSWORTH (Mayor),
Chairman Board of Control.

Board of Education
TORONTO

TENDERS WANTED

Sealed tenders, addressed to the Secretary-Treasurer of the Board, will be received until

FRIDAY, NOON, MARCH 30TH, 1906,

for the several works required for the

Enlargement of Jameson Avenue Collegiate Institute.

Plans and specifications may be seen and all information obtained at the office of the Board of Education, City Hall. Each tender must be accompanied by the deposit mentioned in said specifications and forms of tender. The lowest or any tender not necessarily accepted.

H. SIMPSON, Chairman of Committee.
W. C. WILKINSON, Secretary-Treasurer.

Tenders for Sewers

Sealed tenders, addressed to Chairman Sewer Committee for the Town of Collingwood, will be received up to 6 p.m. MARCH 28TH, 1906, for the construction of the following sewers in above named town. Tenders will be received for construction only or complete with tile.

PIPE:
1400 ft. of 6" pipe
5852 " " 8" "
4928 " " 10" "
4250 " " 12" "
2624 " " 15" "
1292 " " 18" "
1440 " " 20" "
1430 " " 24" "
56 pcs. quarter bends 6"
384 " 8" x 6" Y jcts.
18 " 8" x 8" T
284 " 10" x 6" Y
260 " 12" x 6" Y
128 " 15" x 6" Y
80 " 18" x 6" Y
80 " 20" x 6" Y
60 " 24" x 6" Y

CONSTRUCTION:
Laying the above named pipe.
32 Manholes at $ .....per manhole
18 Lampholes at $..... " lamphole
56 Catch basins at $..... " catch basin
3 Flush tanks at $..... " flush tank
1 Septic tank at $.....

EXCAVATION:
7000 cubic yds. of sand at....cts. per cubic yd.
5000 " " of rock at $.... " "
12000 " " refilling at....cts. " "

A certified bank cheque payable to the Treasurer, Town of Collingwood, for the amount of 5 per cent., must accompany each tender, the same to be forfeited if the successful tenderer decline the contract or fail in the performance thereof and will be returned in case of non-acceptance.

The lowest or any tender not necessarily accepted.

Plans and specifications may be seen at the Town Clerk's office.

R. McDOWALL, C. E.
Engineer.

JOHN MAIR, Esq.,
Chairman Sewer Committee.

[FOR ADDITIONAL ADVERTISEMENTS FOR TENDERS SEE NEXT PAGE.]

TOWN OF OWEN SOUND DEBENTURES.

Sealed tenders, addressed to the undersigned, will be received up to 5 o'clock p m. on FRIDAY, 23RD MARCH, 1906, for the following debentures:

$8,642.96. Twenty years 4 per cent., issued for sewer purposes, dated 6th December, 1905

$12,931.80. Twenty years 4 per cent, issued for permanent walk purposes, dated 6th December, 1905.

$25,000. Fifteen years 4 per cent., issued for loan to factory, dated 22nd January, 1906.

Said debentures, principal and interest, payable at Traders Bank, Owen Sound.

A. J. SPENCER,
Town Treasurer.

Owen Sound, 26th February, 1906.

CITY OF BRANTFORD

Tenders for Cement, Sewer Pipe, Paving Brick and Lumber.

Sealed tenders, addressed to W. D. Schultz, Esq., Chairman of the Board of Works, in care of the City Clerk, Brantford, Ont., will be received till 12 o'clock, noon, on

THURSDAY APRIL 5th, 1906,

for the supply of Cement, Sewer Pipe, Lumber and Paving Brick required by the City of Brantford for 1906.

Instructions to bidders and forms of tender may be obtained on application to the City Engineer. Each tender must be accompanied by a marked cheque payable to the order of the City Treasurer for the amount called for in the form of tender. The lowest or any tender not necessarily accepted.

T. HARRY JONES,
City Engineer.

City Engineer's Office,
Brantford, March 19th, 1906.

TOWN OF NORTH TORONTO

Tenders for Boiler, Pump and Heater

Sealed tenders, addressed to the undersigned, and endorsed "Tender for Boiler, Pump and Heater," will be received up to and including MONDAY, THE 26TH DAY OF MARCH NEXT, for a Tubular Boiler, a Compound Duplex Pump, and an Open Feed Water Heater, for the Waterworks System of the Municipality of the Town of North Toronto.

Parties tendering are asked to submit a separate tender for each of said waterworks equipments, or any one item of same.

Specifications are now in the office of the Town Clerk, at the Town Hall, North Toronto (Eglinton) and can be seen at any time during office hours.

The lowest or any tender not necessarily accepted.

WILLIAM J. DOUGLAS,
Town Clerk,
Eglinton P.O.

TENDERS FOR House of Refuge

Sealed tenders for House of Refuge, on site near Belleville, in County of Hastings, will be received by the undersigned up to noon of the 17TH DAY OF APRIL, 1906, for whole building or for each kind of work, according to plans and specifications, namely:—

1. Bulk tender for whole building.
2. Mason, Brick and Plaster work.
3. Heating, Plumbing and Metal work.
4. Carpenter and Joiner work.
5. Painting and Glazing work.

Plans and specifications may be seen at the office of the County Clerk, Belleville; or at the office of G. M. Miller & Company, Architects, Toronto.

Approved security for the satisfactory completion of whole building by 1st August, 1907, will be required of contractor.

If separate contracts for the different kinds of work are made each kind of work must be done in time for the whole building to be finished as aforesaid.

The lowest or any tender not necessarily accepted.

WM. R. AYLESWORTH,
County Clerk,
Belleville.

Shire Hall, March 15th, 1906.

WANTED

To rent one sewer trench machine, capable of excavating a 6 ft. by 20 f t. trench, Moore or Carson preferred; also one trench excavator, capable of excavating a trench 27 inches by 12 ft. Eight months. Address, Box 83, CONTRACT RECORD, Toronto.

TENDERS

for an addition to the Daly House, corner Front and Simcoe streets, will be received up to 24TH MARCH inclusive.

Lowest or any tender not necessarily accepted.

G. M. MILLER & CO., Architects,
Toronto General Trusts Building,
Toronto.

Sealed Tenders

Sealed bids will be received by the undersigned up to 12 o'clock, noon, on MARCH 28TH, for all trades required in the erection of Two Houses in Dovercourt Road, Toronto.

Lowest or any tender not necessarily accepted. Plans and specifications may be seen at the office of the Architect.

F. S. BAKER, Architect,
Mail Building, Toronto.

Sealed Tenders

Sealed bids will be received by the undersigned up to 12 o'clock, noon, on MARCH 24TH, for all trades required in the erection of a Stone Residence for J. M. Henderson, Esq., in Russell Hill Drive, Toronto.

Lowest or any tender not necessarily accepted. Plans and specifications may be seen in the office of the Architect.

F. S. BAKER, Architect,
Mail Building, Toronto.

CONTRACTS OPEN.

RIVER GLADE, N.B.—A Baptist church will be built here this spring.

HAILEYBURY, ONT.—McIntosh & Hamilton are preparing to build a new store.

CANNINGTON, ONT.—T. A. Wilson is preparing to build a new block here.

WALKERVILLE, ONT.—A warehouse will be built by Hiram Walker & Sons.

MIDALE, SASK.—W. J. McKay has procured a site on which to erect a large store.

COBDEN, ONT.—Efforts are being made to have a large roller flour mill established here.

EDGAR'S MILLS, ONT. — Albert Long, of McGregor, will erect a fine residence here.

PORT CREDIT, ONT.—A. E. Hare is preparing to erect two frame cottages to cost about $1,800.

KAMLOOPS, B. C.—W. Hargraves will erect a two storey show room 32 x 50 feet on Victoria street.

DUNDURN, SASK.—Farr & McMillan intend building a large addition to their hotel this spring.

MELFORT, SASK.—The Standard Oil Company will build a wholesale warehouse here this season.

SHEPPARD, ALTA.—Steps are being taken to have a large music hall here. P. Rochon is interested.

WALTON, ONT.—T. G. Waghorn, V.S., is preparing to build a cement veneer dwelling this spring.

MOUNT PLEASANT, B. C. — Dornish & Cooper are preparing to erect a large factory here.

ATHERLEY, ONT.—It is understood that John Thompson intends enlarging his summer hotel.

COLERIDGE, ALTA.—Alex. Middleton has taken tenders for the erection of a new school house here.

MACLEOD, ALTA. — The Town Clerk will likely install waterworks and sewerage systems this year.

RED DEER, ALTA.—A by-law to raise $20,000 for a sewerage system will be submitted to the ratepayers.

EMERSON, MAN.—At a recent meeting of the School Trustees it was decided to rebuild the school here.

SUSSEX, N.B.—A new club building is proposed to be erected here, to cost $6,000. S. H. White is interested.

CROSS CREEK, N.B.—Amas Killam, bridge inspector of I.C.R., has decided upon a new 40 foot bridge here.

WOLFVILLE, N.S. — Subscriptions are being received for a science building in connection with Acadia University.

NORTH BATTLEFORD, SASK.—J. R. Chisholm purposes building a store on Main street this spring, 75 × 75 feet.

ARCOLA, SASK.—Tenders are being received this week by Charles Jefferson for erection of new school at Buffalo Hill.

FORT WILLIAM, ONT.—The resident engineer of the C.P.R. has submitted plans for the new freight sheds and docks here.

CHATHAM, ONT.—The Chatham Fruit Growers Association propose erecting a factory and warehouse, 200 x 30 feet.

DALHOUSIE, N.B. — The Town Council propose to borrow $78,000 for installation of waterworks and sewerage systems.

QUEBEC, QUE.—A large building will be erected for Faguy, Lepinay & Frere on the site of the one recently burned.

CAMPBELLCROFT, ONT. — The Methodist congregation are canvassing for subscriptions for a new church to cost $20,000.

CARBERRY, MAN. — The ratepayers have carried a by-law authorizing the installation of a municipal electric light plant.

OUTREMONT, QUE.—J. Kruse will receive tenders up to 21st inst. for construction of a 12-inch tile sewer on Querbes street.

SARNIA, ONT.—The Imperial Oil Company will build a three storey brick candle factory in connection with their works here.

ATTERCLIFFE, ONT.—M.E.Miller will erect a large storage building in connection with his carriage works here this spring.

GALT, ONT.—The Jackson Wagon Company, of St. George, have asked the Town Council for inducements towards locating here.

WINGHAM, ONT. — H. Simpson, architect, Toronto, is preparing plans for the new High school to be erected here, to cost $15,000.

SUTTON, ONT. — A Government engineer has been here in connection with the building of a public wharf on the lake shore.

ST. THOMAS, ONT.—At the meeting of the Y.M.C.A. directors, the building of a gymnasium to cost about $10,000 was discussed.

GRAVENHURST, ONT. — The Council has decided to ask Andrew Carnegie for $7,000 for the building of a public library here.

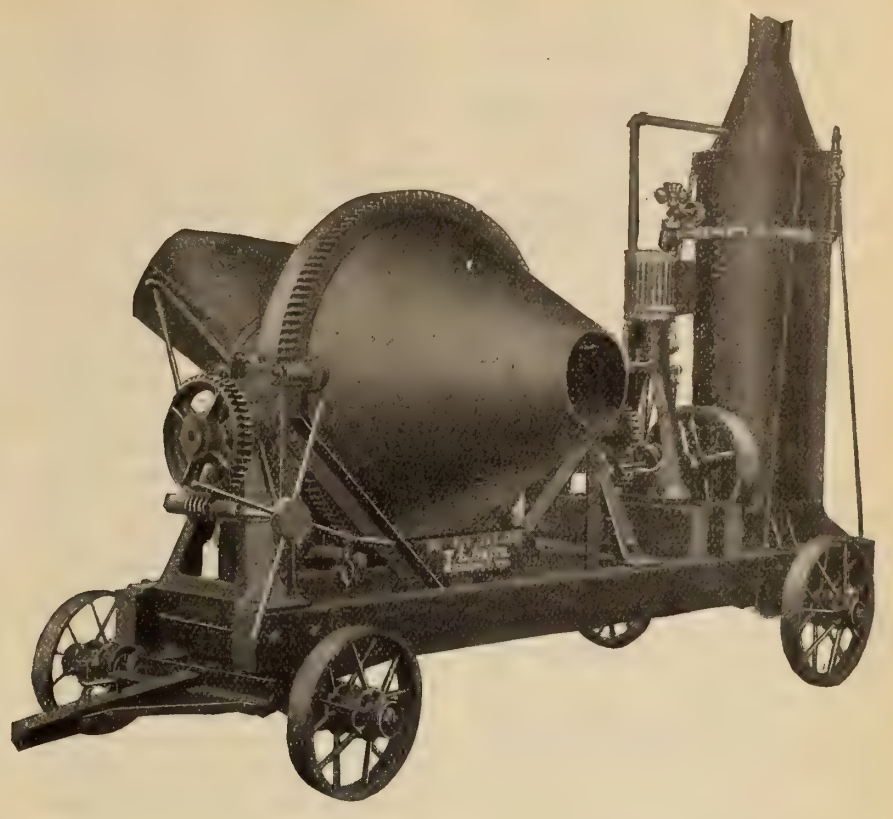
WALLACEBURG, ONT. — The Council have decided to ask Andrew Carnegie for a grant of $7,500 to build a public library here.

VERMILLION, ALTA.—H. Alanson will build a large residence here.—The Merchants Bank will erect a brick building to cost $10,000.

MEAFORD, ONT.—A movement has been started to provide for the erection of a Y. M. C. A. building this summer, at a cost of about $4,500.

CRANBROOK, B. C.—A. Doyle and J. Carroll, proprietors of the Taber Hotel, have decided to make large additions to that building this summer.

THE SMITH CONCRETE MIXER



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THE ABOVE STATEMENTS

are general ; we want you to communicate with us for details.

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MONTREAL

LANGLEY PRAIRIE. B. C.—The Westminster Fruit Packing Company purpose making a large addition to their factory here this season.

VERNON RIVER BRIDGE, P.E.I. —Tenders will be received by George Forbes up to April 1st for building a double tenement house here.

NORWICH, ONT.—The Streets and Walks Committee have recommended the construction of a steel bridge on Pitcher street, to cost $1,136.

WATERLOO, ONT.—A by-law to loan $7,500 to the Specialty Knitting Company, of Galt, to establish a factory here, will be voted on April 9th.

UPPER GAGETOWN, N.B.—Tenders will be received at the Department of Public Works, Fredericton, up to March 26th, for rebuilding the wharf here.

DOAKTOWN, N.B.—Amasa Killam, bridge inspector of the I. C. R., has decided on a new steel structure 160 feet long to replace the present bridge here.

VICTORIA, B. C.—Tenders have been taken by F. M. Rattenbury, architect, for a brick office building for the British Columbia Electric Railway Company.

CARMAN, MAN.—Tenders have been taken by Darling & Pearson, architects, Winnipeg, for the erection of a Canadian Bank of Commerce building here.

CLAREMONT, ONT. — G. W. Gouinlock, architect, Toronto, is preparing plans for a brick and stone residence for Thomas Graham, to cost $15,000.

PORTAGE LA PRAIRIE, MAN.—The Midland Railway have submitted plans for a bridge 400 feet long to be built over the Assiniboine River at this town.

DELNORTE, ALTA.—M. Brunelle, of Edmonton, has made preparations to build a three-storey hotel here.—Jones & Co. will build a two-storey store, 25 x 35 feet.

NEW TORONTO, ONT.—At a public meeting recently held here it was decided to have a new school built this season. Adam Dyer is one of those interested.

SAULT STE. MARIE, ONT.—The Lake Superior Corporation have adopted plans for the new open hearth furnaces. The building will be 200 x 110 feet and cost about $250,000.

MILLE ROCHES, ONT. — P. N. Tait will receive tenders up to March 20th for construction of granolithic sidewalk in this village. Specifications at office of Keyar & Bennett.

PORT COLBORNE, ONT.—D. W. Carter has donated a lot to St. James' church, on which the congregation will make an effort to have a Sunday school building erected this summer.

LINDSAY, ONT.—The G.T.R. desire to make short connection between Toronto and Ottawa and are making a survey northward from Haliburton on, the Lindsay to Fenelon Falls branch.

PICTON, ONT.—The Town Council decided to accept $10,000 from Andrew Carnegie for the building of a new library here.—A Collegiate Institute will be built here this summer at cost of $30,000.

TILSONBURG, ONT. — The Erie, London & Tilsonburg Railway will seek incorporation to empower them to build an electric railway from Port Burwell to London with branch line to this town.

BEAVERTON, ONT. — New residences will be erected this season by the following: H. Logan, George Suter, W. Joyce, J. Smith, A. Moore, F. S. King, Sr., E. H. Tisdall and Mrs. A. Calder.

ST. CATHARINES, ONT.—E. F. Seixas will receive tenders up to March 30th for grading, etc., of the branch line of the Niagara, St. Catharines & Toronto Railway Company between Thorold and Welland.

CALGARY, ALTA. — Robinson & Company are having plans prepared for an extension to their store.—W.L.Waines will receive tenders up to April 9th for $90,000 4½ per cent. public school debentures.

PERTH, ONT.—The Council have decided to submit a by-law to purchase a site for a new public library building.—H. K. Wampole & Co. have purchased a site on which they will erect a box factory this season.

SMITH'S FALLS, ONT.—The by-law to loan $150,000 to the Frost & Wood Company to enable them to rebuild here has been carried. The company are having plans prepared for large modern shops.

TREHERNE, MAN. — Dr. Staples will build a new residence this summer. —Tenders have been taken by Darling & Pearson, architects, Winnipeg, for the erection of a Canadian Bank of Commerce building here.

LENORE, MAN.—J. A. Carleton will receive tenders up to April 6th for the erection of a four-roomed school. Plans at the hardware store here, and from 19th to 24th inst. at office of Agnew & Smith, Virden, Man.

NEWMARKET, ONT. — R. A. Smith has purchased the Sykes Block to which he intends building a brick addition 66 by 26 feet.—Mrs. D. S. Wright is having plans prepared for a new house to be built on Botsford street.

NIAGARA FALLS, ONT.—J. G. Cadham, on behalf of the Canadian Ethanite Gompany, has asked the Stamford Township Council for inducements to establish chemical works here. The proposed plant would cost $100,000.

MEDICINE HAT, ALTA.—It is reported that a large hotel will be erected this summer near the C. P. R. station.—The Alberta South-Eastern Telephone Company have been incorporated to construct a rural telephone system.

WELLAND, ONT.—E. Hughes will erect a new business block on the site of the Bon Ton building.—Lawrence & Sutherland have made arrangements for the erection of a two story cement block on East Main street, to cost about $2,500.

BROCKVILLE, ONT. — The St. Lawrence Engine Company are considering the erection of 12 large boathouses at the foot of their premises.—The Fulford Estate have purchased a site in Oakland cemetery on which to erect a mausoleum to cost $25,000.

BELMONT, N. S.—Tenders will be received at the Department of Railways, Ottawa, Ont., up to March 27th for the erection of a station and dwelling. Plans at the Station Master's office here and at the office of the Engineer of Maintenance, Moncton, N.B.

EAST TORONTO, ONT.—William N. McEachren, Leuty avenue, will build three stores on Queen street east, near Lee avenue.—A by-law has been passed to raise money for school purposes. A portion of this will be spent on building a new school at the Beach.

PETERBORO, ONT. — Stevens, Hepner & Co., Port Elgin, Ont., have asked for inducements for them to locate their broom factory here. — The City Council have passed a resolution that a by-law be voted upon to raise $35,000 for the erection of a 12-room school.

PORT ARTHUR, ONT. — Contractor Sheppard has purchased a site on

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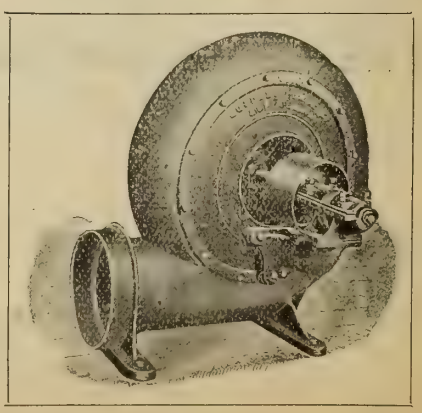

Canadian Buffalo Forge Company, Limited
MONTREAL, QUE.

which he will erect several houses.—Tenders will be received by Fred Gelinas, Department of Public Works, Ottawa, Ont., up to April 14th for dredging in the horbor here. Specifications at above named offices.

MIMICO, ONT. — H. Simpson, architect, Toronto, is preparing plans for the restoration of the Assembly hall of the Industrial Home, to cost $15,000.—A site has been purchased from the Johnson estate, on east bank of Humber River, on which a paint and color mill is to be built.

SHELLMOUTH, MAN. — Fred Gelinas, Department of Public Works, Ottawa, Ont., will receive tenders up to April 9th for construction of two concrete piers and two abutments here. Plans at above named department, and with Zeph. Malhiot, resident engineer of the Department at Winnipeg, also at post office here.

WEYBURN, SASK. — The Town Council have engaged John Galt, C. E., to prepare plans for an electric light and waterworks system to cost $50,000.—The Presbyterian congregation are taking tenders for a new church to cost $15,000.—The Baptist, Roman Catholic and Anglican denominations are also preparing to build new churches here.

LONDON, ONT.—N. T. Kettlewell has taken out a permit to erect a residence on Ridout street.—E. Bourne will build a residence on Anderson avenue.—The plans of the G.T.R. for four elevated tracks through the city have been submitted to the Railway Commission.

COLLINGWOOD, ONT.—The Board of Works have recommended the construction of a macadam roadway on Hurontario street, at estimated cost of $6,000.—The time for reception of tenders for sewers is March 28th, instead of April 28th as stated in advertisement in the CONTRACT RECORD last week.

CHARLOTTETOWN, P. E. I.—J. C. MacDonald, Bishop of Charlottetown, will receive tenders up to April 4th for the completion of the interior of St. Dunstan's Cathedral. Plans at the Bishop's Palace and at the office of F. X. Berlinguet & Company, architects, 209 St. John street, Quebec, Que.

AMHERST, N.S.—The present building of the Royal Bank is to be replaced by a marble structure.—The Bank of Nova Scotia building is to be remodelled this season.—The Loyal Orange Lodge are having the building, corner Church and Chandler streets, remodelled for use of their society.—The Methodists are agitating for a new church building.

SASKATOON, SASK.—W. W. La Chance, architect, of this city, has plans prepared for an up-to-date department store to be erected for J. F. Cairns. Excavations are being made now by dynamite to hasten building operations. Same architect is preparing plans for store buildings for W. H. McBeth and for A. E. Young to cost about $35,000.

ST. JOHN, N. B.—W. M. Mitchell, architect, has prepared plans for a new residence on Wentworth street, for H. V. Hatfield.—It is understood that the work of re-building the new Royal Bank will begin as soon as the ruins are cleared away.—E. T. P. Shewen, Government Engineer, is preparing plans for the further dredging of Rodney slip.

TORONTO, JUNCTION, ONT.—Annette Street Methodist Trustee Board are preparing to erect a new church, corner High Park avenue and Annette street, to cost $40,000.—Building permits have been granted as follows: Dr. Wyatt, frame dwelling on Lakeview avenue, cost $2,000; H. N. Morrison, stone and brick dwelling on Lakeview avenue, cost $3,500; H. S. Chappell, two-storey stone and brick dwelling on Lakeview avenue, cost $1,700; CH.GeoL[illegible] evie[illegible]igon Fairview avenue, cost $1.600.—Roland Neller, of Hamilton, Ont., has plans ready for a house to be built on Fairview avenue, to cost $2,500.

BRANTFORD, ONT. — Wilkes & Henderson have purchased the premises occupied by the C.P.R. Telegraph Company, which they will have remodelled into modern offices.—Plans have been prepared for the addition to the T. H. & B. station here, cost about $6,000.—The American Radiator Company are establishing a branch of their works here in the old factory of the Cockshutt Plough Works and will make extensive alterations in the building.

OTTAWA, ONT.—The Civic Finance Committee are discussing the plan of erecting new swimming baths here to cost about $2,000. — The City Waterworks Committee have decided to call for new tenders for supply of hydrants and valves.—Fred Gelinas, Secretary Department of Public Works, will receive tenders up to April 14th for dredging in Mission and Kaministiquia Rivers, Ont. Specifications at above named department.—A deputation, including Mayor Ellis, have asked the Legislature for $10,000 for new dairy buildings for the exhibition grounds here.

STRATFORD, ONT.—Building permits have been issued recently as follows: William Soder, brick residence, Douro street; Mrs. McEwen, two brick residences, Nile street; Thomas Mahoney, three residences on Douro street; John A. Murray, residence on Cobourg street; Peter Bradshaw, residence on Water street; James Wilson, brick hotel on Downie street; Frank Hassell, brick residence on Birmingham street; William

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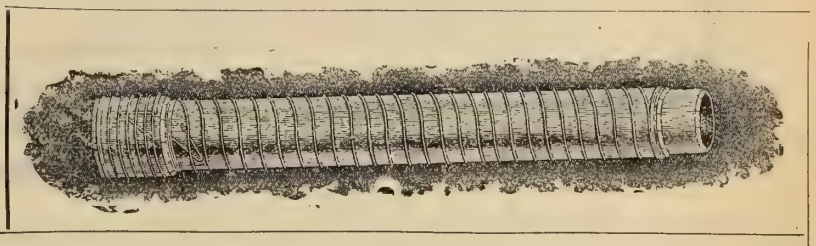

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Shore, brick residence on Huron street. —The directors of the hospital have recommended that a new wing be built to the building.

MOOSE JAW, SASK.—George Perry has purchased a site on River street on which to erect a large hotel.—Darling & Pearson, architects, Winnipeg, have taken tenders for Canadian Bank of Commerce building. — Battell Bros. have plans prepared for a brick and cement block, 50 × 80 feet, to be built on High street west.—The Pioneer Lumber & Implement Company have plans prepared for a two-storey building, 50 × 80 feet, corner High street and Ninth ave.

HAMILTON, ONT.—Kerwan Martin has purchased a site on Aberdeen avenue on which he will erect a residence.—Local capitalists are talking of building a railway from this city to Guelph. Samuel Barker, M.P., is one of those interested.—C. W. Bennett, of London, manager of the Vaudeville Theatre Company, has been looking for a site here for a new theatre building.—Plans for the alterations to St. Andrews church were submitted at a recent meeting of the congregation and it was decided to proceed with the work. The estimated cost is $15,000.

REGINA, SASK.—W. W. LaChance, architect, is preparing plans for a warehouse 54 x 124 ft., two stories and basement, of heavy mill construction, to cost about $23,000, for the H. W. Laird Co., Limited. Same architect is preparing plans for the new stock yards to submit to the Board of Trade, and is working on plans for the $50,000 Methodist church. He is taking tenders for several residences and for alterations and additions to the Windsor Hotel. — W. H. Laird will build a wholesale warehouse on Dewdney street, 54 x 125 feet.—W. W. LaChance, architect, is preparing plans for the construction of an apartment house, corner of Cornwall and Twelfth avenues, to cost $70,000.

BRANDON, MAN.—A frame building 120 x 125 feet will be built on Princess avenue for the live stock exhibition, cost $50,000.—Geo. F. Sykes wil receive tenders up to April 12th for $90,000 4½ per cent. waterworks debentures, also for $10,005 ten year and $49,062.17 twenty year 5 per cent. local improvement debentures. — The Brandon Machine Works will enlarge their plant this year, adding an office building and warehouse 80 x 120 feet.—April 10th is the date fixed for voting on the by-law providing for the expenditure of $80,000 on school buildings this year.—W. A. Elliott will receive tenders up to 24th inst. for erection of a brick and stone 4-story building for Brandon College.

EDMONTON, ALTA.—A store will be built for Mrs. Sandison, corner of Queens avenue and Rice street.—R. P. Barnes, architect, Toronto, has prepared plans for a new Imperial Bank building here to cost about $60,000. — Thomas Page, architect, has prepared plans for a new two and one-half storey immigration hall to cost $10,000.—Building permits have been issued as follows: John A. Cameron, residence on Fifteenth street; W. R. Killops, residence, Syndicate street, cost $3,000; R. Likeley, three dwellings on Thirteenth street, cost $5,400. — Minneapolis capitalists have purchased the Great West Implement site on which to erect a large hotel.—Thomas Ryan & Company, of Winnipeg, purpose opening a branch of their business here.

VANCOUVER, B. C.—A new theatre is to be built on the corner of Hastings street and Gore avenue.—Salmon traps will be built this season on the Straits of Juan de Fuca for the B. C. Packers' Association, Bell-Irving Company, Malcolm Canning Company, of this city, and the Capital City Canning Company, of Victoria.—The time for closing the competition for plans for new court house building here was extended from the 10th to the 20th inst.—The A. M. Forbes Hardware Company have purchased a site on Front street on which they will erect a large factory building.—Tenders have been taken by C. K. Shand, architect, for Evans B. Dean & Co's theatre, corner Hastings street and Gore avenue. —W. T. Whitehead, architect, has been instructed to prepare separate plans for a wharf and the proposed market building.

MONTREAL, QUE.—W. E. Doran, architect, is preparing plans for a four-storey wing to be added to the building of the Home of the Little Sisters of the Poor, Inspector street, to cost $75,000.—The congregation of St. Thomas church purpose erecting a new edifice, corner of Delorimier avenue and Sherbrooke street, to cost $20,000.—The new office building of the Grand Trunk Railway to be erected on McGill street will cost about $75,000.—T. L. Taylor & Company have been granted a ten years' exemption from taxation to establish brass works at a cost of $20,000.—L. K. Jones, Department of Railways and Canals, Ottawa, Ont., will receive tenders up to March 23rd for paving approaches to the bridges on Lachine Canal. Specifications at office of Superintending Engineer of Quebec Canals, No. 2 Place d'Armes, Royal Insurance Building.—L. K. Jones, Department of Railways and Canals, Ottawa, Ont., will receive tenders up to 21st inst. for 7,000 barrels of Portland cement. Specifications with Superintending Engineer of Quebec Canals, Royal Insurance Building.

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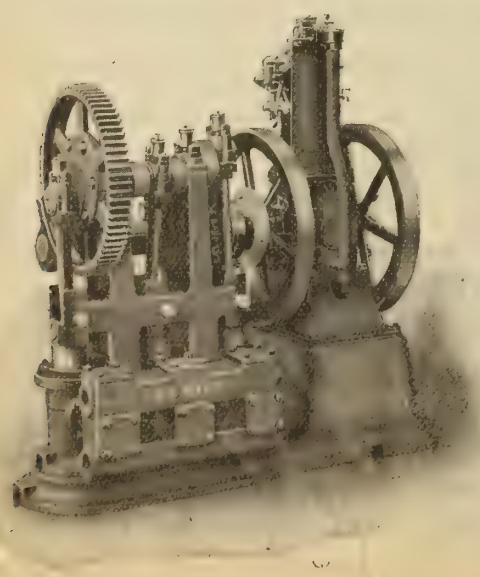

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WINNIPEG, MAN. — John Woodman, architect, will receive tenders up to March 24th for a six-storey store and office building for J. A. M. Aikins, K.C. —A syndicate of business men has been formed to establish a large creamery and condensing milk factory.—Thomas Ryan & Company propose erecting a large warehouse on their property on Princess street. — The Department of Public Works intend calling for new tenders for the dam and lock of St. Andrew's rapids.—The City Engineer has been asked to report on the cost of a steel overhead bridge over the C.P.R. tracks. —It is understood that the Imperial Bank intend replacing their present building, corner Main street and Bannatyne avenue, by a modern building to cost $100,000.—J. H. G. Russell, architect, will receive tenders up to 23rd inst. for erection of a residence on Assiniboia ave. —The Chairman of the Finance Committee will receive tenders up to April 27th for $118,174.97 seven year, $57,365.-93 ten year, $89,343.30 fifteen year, $318,-218 04 twenty year, $1,071,337.91 thirty year, 4 per cent. city debentures.—The Shaarey Shomayim congregation have bought a site on Dagmar street, on which they will build a synagogue to cost $20,-000.—F. R. Evans, architect, will receive tenders up to March 23rd for erection of a residence on Bannatyne avenue for G. Frankfurter.

TORONTO, ONT.—A.C. Barrett has taken tenders for a brick house on St. Clair avenue to cost about $4,500.—H. Simpson is preparing plans for a brick house on Farnham avenue for John Alexander.—G. W. Gounilock, architect, is preparing plans for a hotel, Queen street west, to cost $2,500, also for Edward Gurney's residence on Walmer road, cost about $50,000.—N. W. Davies, architect, is taking tenders for building an eight-roomed house.—The School Board have asked Mr. Bishop, Superintendent of Buildings, to report on the cost of installing an electric light plant for the Technical School.—Plans have been prepared for a new building for the Lakeview Curling Club on the site of their present rink, to cost $6,000.—McKenzie & Mann have purchased property on Toronto street, north of the offices of the Canadian Northern Railway, and it is said that large office buildings will be erected.—The Methodist Social Union has notified the Trustee Boards of Simpson avenue and Centennial (Dovercourt Road) Methodist Churches that it will give $10,-000 each towards the cost of new churches at these places, provided that each congregation raise another $10,000. As this amount has been nearly subscribed by each congregation, plans are being prepared for the new buildings.—The Property Committee have decided to repair the tower of St. Lawrence Market, at a cost of $1,600.—Nineteen sets of plans for the new public library building have been submitted, but none were perfectly satisfactory to the judges. Four of these were regarded as forming a basis for further competition.—It is reported that the property at south-west corner of College street and Spadina avenue, recently sold by the W.R. Stewart Estate, has been purchased by the Crown Bank for a site for a branch building.—City Engineer Rust has recommended the following asphalt pavements: Queen

(Continued on page 12)

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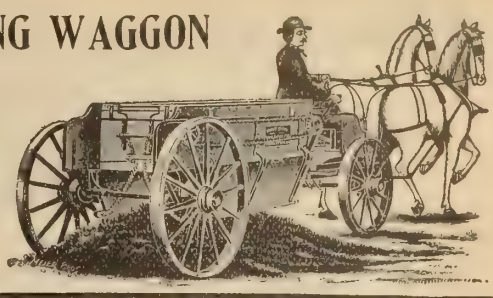

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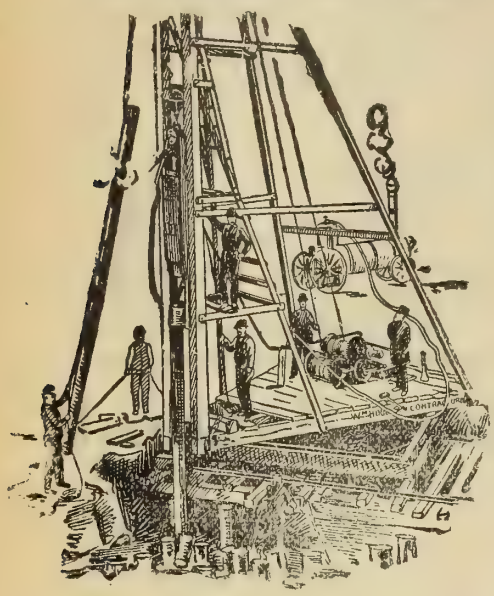

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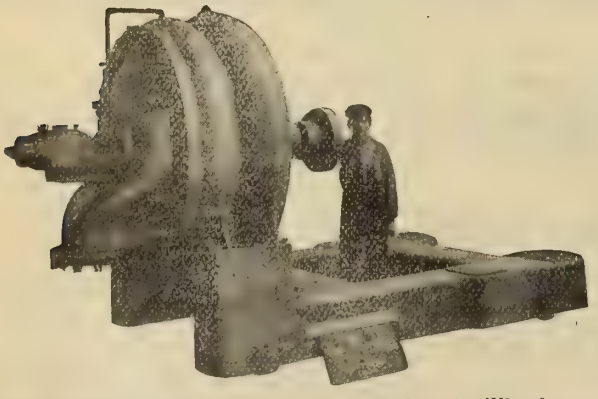

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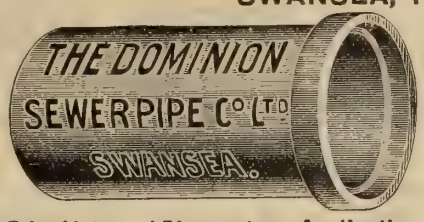

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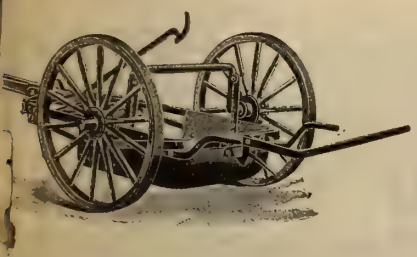

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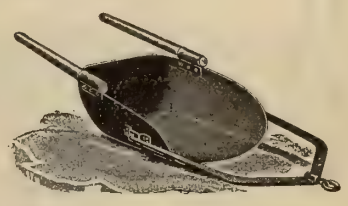

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							Neat.					3 (Sand) to 1 (Cement)				
					Initial	Final	1 dy.	7 dys.	28 dys.	3 mos	1 yr.	1 dy.	7 dys.	28 dys.	3 mos.	1 yr.
1903	20	O.K.	3.135	2.1	162	345	307	701	783	827	*	74	214	299	367	*
1904	44	O.K.	3.150	2.0	132	342	300	744	848	914	938	86	262	354	401	427

* Tests for 1 year were not completed when records closed. 1905 report not yet issued.

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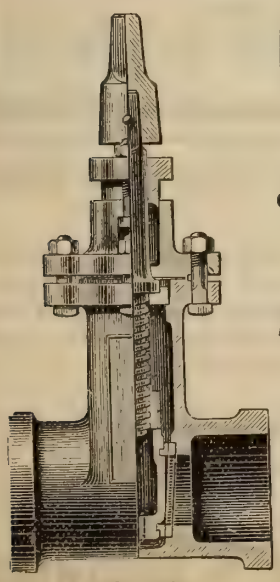
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street, from Yonge to River, $30,830; Sherbourne street, from King to Bloor, $37,010; Bay street, from King to Queen, $9,346; Jarvis street, from Queen to Bloor, $47,243; Olive avenue, from Bathurst to Palmerston, $3,914; Huntley street, from north side of bridge to South Drive, $6,236, and tar macadam pavement, John street, from Queen to Grange, $2,236.—The plans for the new theatre proposed for King street west are in the hands of Carrere & Hastings, architects, New York, and John M. Lyle, architect, this city, estimated cost $250,000.—The City Engineer recommends application to be made to the Railway Commission for permission to build a bridge over the tracks to connect Wallace avenue with Dundas street. His estimate of the cost to construct trunk sewer and septic tanks and filter tanks as recommended by Board of Health, is $2,750,000.—Building permits have been issued as follows: H. S. Alexander, 2 pair 2½ storey stone and brick dwellings, Macpherson avenue near Avenue road, cost $10,000; A. A. Kennedy, pair 2½ storey brick dwellings, Grace street, near College, cost $5,000; Robert Hewitt, 2 storey and attic brick dwelling, 28 Fuller street, cost $2,500; Dr. Treble, 2½ storey brick dwelling, corner College street and Palmerston avenue, cost $6,000; James Penrice, pair 2½ storey brick dwellings, corner Florence street and Sheridan avenue, cost $4,000; F. Johnstone & Co., pair 2 storey roughcast dwellings, corner Albert and Wallace avenues, cost $1,800; J. W. Devitt, 2 storey and attic brick dwelling, corner Barton and Albany avenues, cost $4,000; M. Ross Gooderham, 2½ storey brick and stone dwelling, corner St. George street and Lowther avenue, cost $17,500; John Meldrum, 2 storey brick veneer dwelling, 168 Marguerette street, cost $2,200; John Owens, 2½ storey stone and brick dwelling, 27 D'Arcy street, cost $1,800; Albert Mills, 2 storey roughcast dwelling, First avenue, near Logan, cost $1,500; D. Caplan, pair 2 storey brick stores and dwellings, Agnes street, near Elizabeth, cost $5,000; J. R. Wood, 3 storey brick store and dwelling, 982 Bathurst street, cost $2,500; W. Avery, pair 2 storey brick veneer dwellings, Lansdowne avenue, near Lappin, cost $6,000; R. T. Brown & Son, 3 pair 2½ storey brick and stone dwellings, Brunswick avenue, near Ulster street, cost $15,000; J. T. Colley, pair 2 storey roughcast dwellings, corner Edwin and William avenues, cost $2,400; Dr. Wilmot Graham, 2 storey and attic brick dwelling, corner College street and Concord avenue, cost $4,500; Wm. L. Marshall, pair 2 storey brick dwellings, Springhurst avenue, near Spencer, cost $5,000; Mrs. Howard Bovell, 2½ storey brick dwelling, Poplar Plains road, near Macpherson avenue, cost $3,500; Fred S. Duff, pair two storey and attic stone and brick dwellings, Beatrice street, near College, cost $5,600; Geo. O'Leary, pair 2 storey brick dwellings, Grace street, near Arthur, cost $4,800; Geo. Eccles, pair 2 storey brick dwellings, Grace street, near Arthur, cost $4,000; J. A. Goddard, pair 2 storey stores and dwellings, stone and brick, Dundas street, near Halton, cost $4,600; J. J. B. Atkinson, 3 storey stone and brick stores and dwellings, 1520-24 Queen street west, cost $8,000; A. Chamberlain, pair 2 storey and attic brick dwellings, Hambly avenue, near Queen street, cost $4,000; Fred S. Duff, pair 2 storey and attic stone and brick dwellings, Beatrice street, near College street, cost $5,400; G. H. Helson, 2 storey stone and brick store and dwelling, corner Bloor street and

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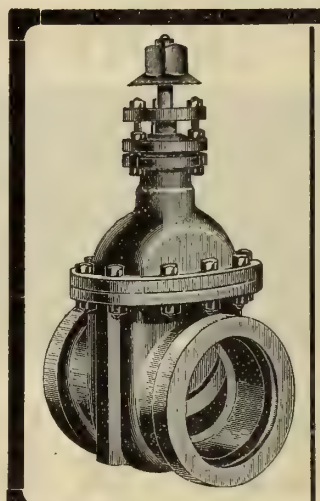

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CONTRACTS AWARDED.

PICTOU, N. S.—New hospital building: J. M. Mitchell, of River John, contractor, cost $4,800.

WOODSTOCK, ONT. — The Silica-Barytic Company, of Ingersoll, have the contract for constructing the sidewalks here for the coming year.

LONDON, ONT.—W. E. Seagrave, Walkerville, has the contract to build new combination chemical and hose wagon for the Fire Department, at $1,120.

GLACE BAY, N.S.—Rhodes, Curry & Company, of Amherst, N.S., have the contract to build 113 miners' cottages for the Dominion Coal Company.

LONDON, ONT. — The Hamilton Bridge Works Company have the contract to build a bridge between the townships of Caradoc and Lobo, in Middlesex county.

PORTAGE LA PRAIRIE, MAN.—The Guthrie Company, of St. Paul, Minn., have secured the contract for grading the Midland Railway from this town to the International boundary line, a distance between 80 and 90 miles.

OTTAWA, ONT.—Rubber hose for fire brigade: Gutta Percha Rubber Co., of Toronto, and Canadian Rubber Company, of Montreal, each to supply 1000 feet at 85 cents per foot.

PICTON, ONT.—It is stated that Mackenzie & Mann have secured control of the Central Ontario Railway running from Picton to Bancroft. This line will, in all probability, be extended to the Canada Atlantic and C.P.R. at Renfrew.

HAMILTON, ONT. — The recommendation of the Board of Works to award the contract for the supply of cement to the Stinson-Reeb Co. was rejected by the City Council, and the contract given to the Lakefield Portland Cement Co. at $1.70 per barrel.

ST. THOMAS, ONT.—Rev. Father West's residence: Mason work, A. E. Ponsford; plastering, T. J. Hill; carpentry, E. Reath; plumbing, Charles Bull; slate roofing, Charles Riddle; metal work, Hamilton & Stott; electric wiring, Sandham & Roberts.

NEW WESTMINSTER, B.C. — The Cunningham Hardware Company have the contract for a quantity of pipe for the waterworks, at $522.50.—Murdoch Martyn and James NcKay have asked for a record of 300 inches of water from Lillooet River for the development of electrical power. It is understood that a company is being organized to supply electrical energy for light and power for Maple Ridge municipality.

REGINA, SASK.—The Roman Stone Co., Ltd., of Toronto, have secured the contract for the Canada Permanent Mortgage Corporation's offices here. The building is to be of reinforced concrete construction throughout, faced with Roman stone and completely fireproof. R. J. Edwards, Toronto, and W. W. Hilton, Regina, architects.

TORONTO, ONT.—R. G. Cluff & Company's warehouse, Lombard street: Brick work, Holtby Bros.; carpenter work, James McKenzie. H. Simpson, architect.—Residence for Miller Nash, Walmer Road: Mason work, Dancy Bros.; carpenter work, A. Weller & Company; plastering, Hoidge & Sons; roofing, G. Duthie & Sons. Curry, Sproatt & Rolph, architects.—Structural steel for new Process building at Exhibition grounds: Hamilton Bridge Works Company.—Dredging in the harbor: Frank Simpson, contractor.—Cut stone for Ross Gooderham's house, Lowther ave.: Roman Stone Company, Ltd., contractors; Chadwick & Beckett, architects.

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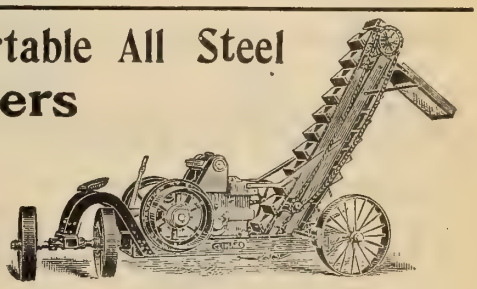

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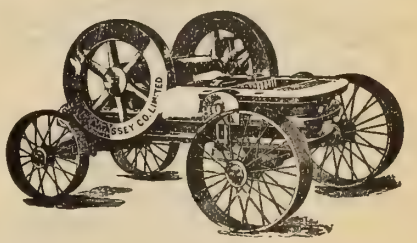

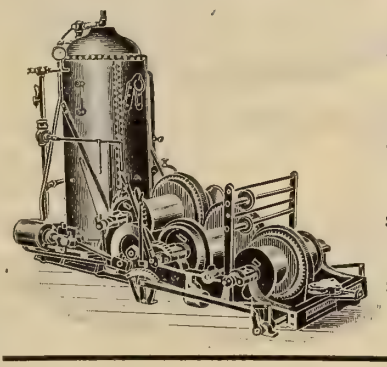
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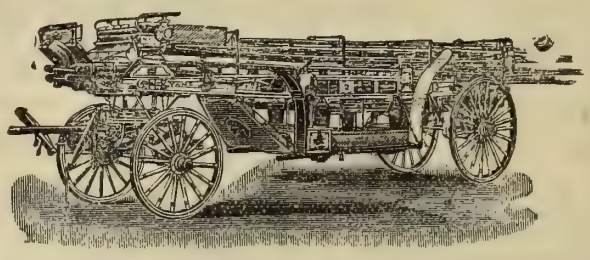

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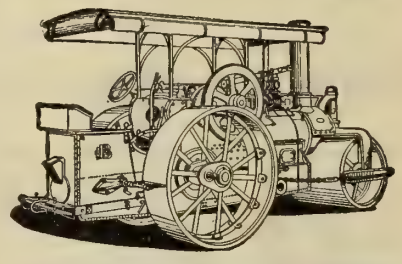

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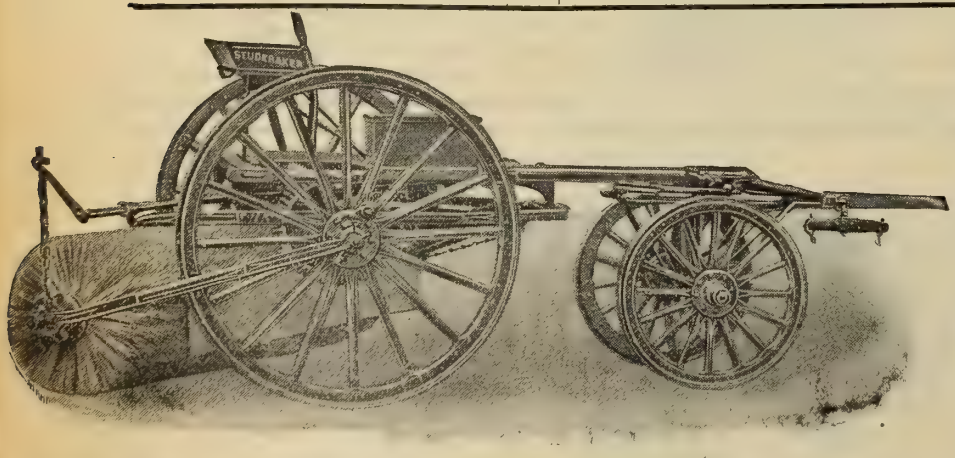

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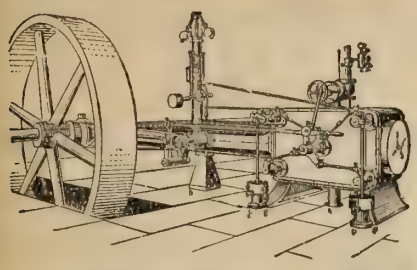

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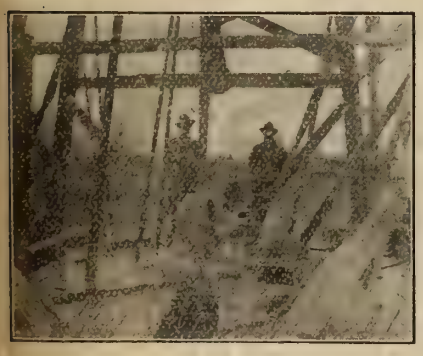

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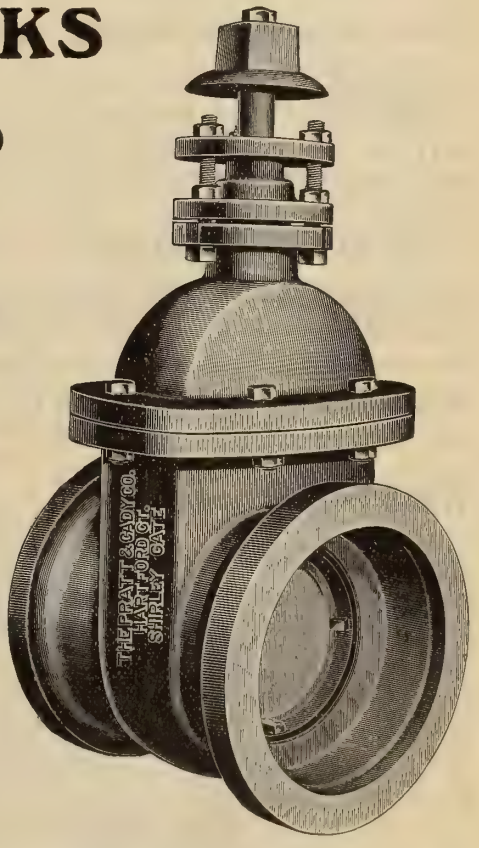

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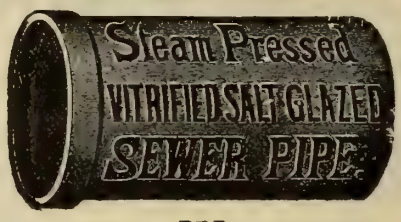

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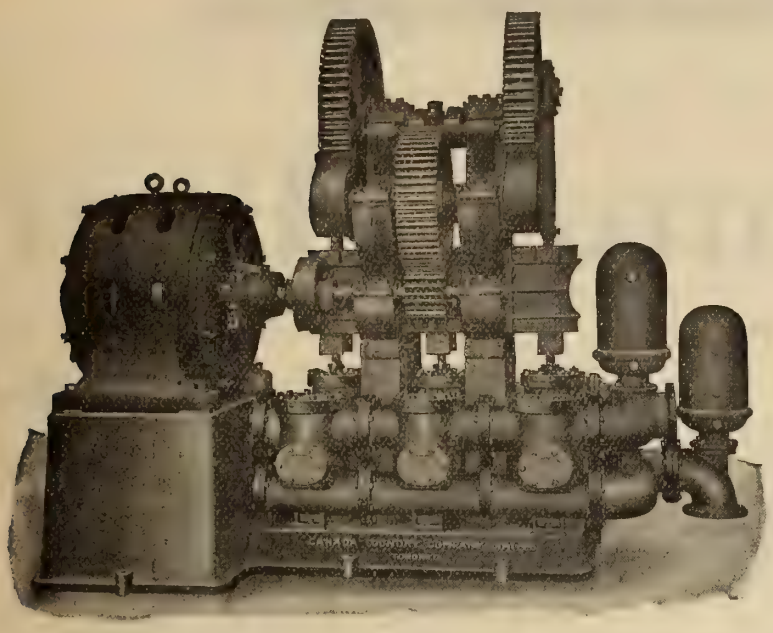

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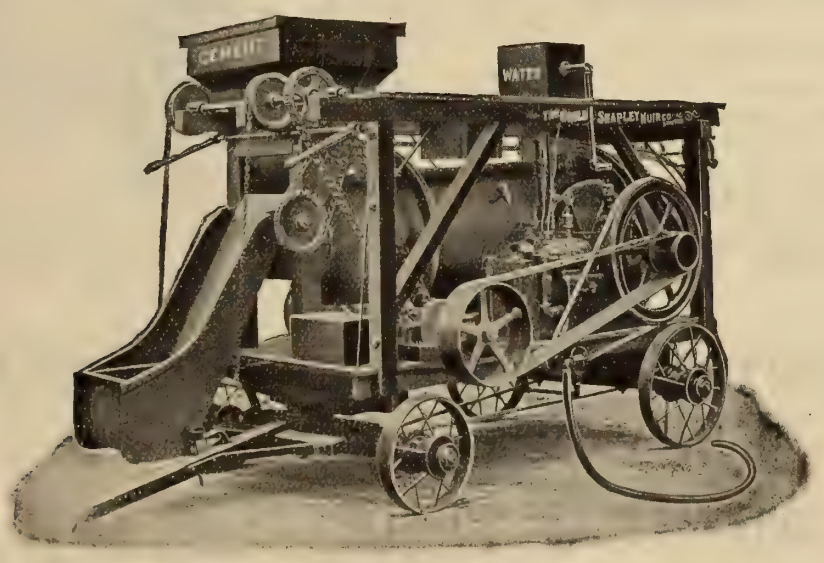

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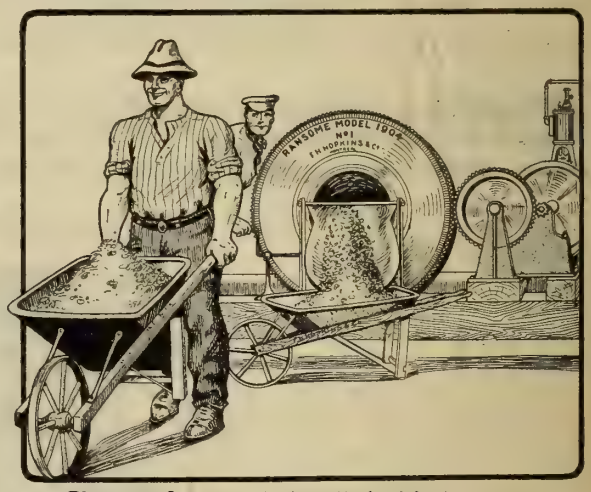

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CANADIAN

Contract Record

A Weekly Journal of Public Works, Tenders, Advance Information and Municipal Progress

This Paper Reaches Every Week the Town and City Clerks, Town and City Engineers, County Clerks and County Engineers, Purchasers of Municipal Debentures and Leading Contractors in All Lines Throughout Canada

VOL. 17. TORONTO, MONTREAL — MARCH 28, 1906 — WINNIPEG, VANCOUVER No. 4

THE CANADIAN CONTRACT RECORD

PUBLISHED EVERY WEDNESDAY

As an intermediate Edition of the Canadian Architect and Builder.

THE C. H. MORTIMER PUBLISHING COMPANY

of Toronto, Limited,

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TENDERS FOR STEEL BRIDGES

Sealed tenders will be received by the undersigned up to noon on MONDAY, APRIL 9TH, for the erection of a 90 ft. span, 14 ft. roadway, Warren truss steel bridge over the Teeswater river, side line 5 Township of Greenock, and also for the erection of of a 110 ft span steel bridge over the Teeswater river, con. 8 Greenock. Floor of bridges to be 4" cedar. Bridges to be so constructed and of sufficient strength that concrete floor may be put on. Parties tendering are required to submit plans and enclose marked cheque for 10% of amount of tender. Tenders will be considered by Township Council at Chepston on April 9th.

J. J. DONNELLY,
Clerk Township Greenock,
Pinkerton P. O., Ont.

March 14th, 1906.

Tenders Wanted

Sealed tenders will be received by the undersigned up to eleven o'clock a.m., of SATURDAY, APRIL 14TH, 1906, for the erection of a Presbyterian Church at McDonald's Corners, to be built of cement concrete blocks.

Plans, specifications, etc., may be seen and all other information obtained at the office of Henry P. Smith, Architect, Kingston, Ont., and at the office of John G. Barr, Merchant, McDonald's Corners, Ont.

Tender may be made for the whole work or for separate portions and must be accompanied by a marked cheque for 5% of the amount of tender, which will be returned in case of non-acceptance.

The lowest or any tender not necessarily accepted.

WALTER GEDDES,
Secretary of the Committee,
Dalhousie Lake, Ont.

SEALED TENDERS

will be received up to 12TH APRIL, 1906, inclusive, for the following :—

1. Residence, upper end of Palmerston Ave.
2. Sunday School on Crawford Street.

The lowest or any tender not necessarily accepted.

G. M. MILLER & CO.
Architects,
Toronto General Trusts Building.

TEMISKAMING & NORTHERN ONTARIO RAILWAY COMMISSION

TENDERS FOR TANKS

Tenders addressed to the undersigned, 25 Toronto St., Toronto, will be received up to MARCH 31ST for the erection complete of four tanks along the line of the Temiskaming & Northern Ontario Railway at the following points:

One tank at or near Uno Park—120 miles from North Bay.
One tank at or near Englehart—138 miles from North Bay.
One tank at or near Blanche River—165 miles from North Bay.
One tank at or near White Clay River—185 miles from North Bay

Plans and specifications are on exhibition at the Chief Engineer's office, North Bay, and at the office of the Secretary-Treasurer, 25 Toronto St., Toronto.

Tenders must be made on the forms supplied. The Commission will not be bound to accept the lowest or any tender.

H W. PEARSON, Secretary-Treasurer,
T. & N. O. Railway Commission,
25 Toronto St., Toronto.

Papers inserting this notice without authority will not be paid for it.

TENDERS FOR House of Refuge

Sealed tenders for House of Refuge, on site near Belleville, in County of Hastings, will be received by the undersigned up to noon of the 17TH DAY OF APRIL, 1906, for whole building or for each kind of work, according to plans and specifications, namely :—

1. Bulk tender for whole building.
2. Mason, Brick and Plaster work.
3. Heating, Plumbing and Metal work.
4. Carpenter and Joiner work.
5. Painting and Glazing work.

Plans and specifications may be seen at the office of the County Clerk, Belleville; or at the office of G. M. Miller & Company, Architects, Toronto.

Approved security for the satisfactory completion of whole building by 1st August, 1907, will be required of contractor.

If separate contracts for the different kinds of work are made each kind of work must be done in time for the whole building to be finished as aforesaid.

The lowest or any tender not necessarily accepted.

WM. R. AYLESWORTH,
County Clerk,
Belleville.

Shire Hall, March 15th, 1906.

WANTED

Architectural Draughtsman by Toronto firm; must be able man. State experience fully and salary expected. Box 84, CONTRACT RECORD, Toronto.

SASKATOON, SASK.

NOTICE TO CONTRACTORS

Tenders will be received by the Secretary-Treasurer until 7 p.m. TUESDAY, APRIL 24TH, 1906, for constructing about 10,000 lineal feet of tile sewers in the Town of Saskatoon

Work to be commenced on May 1st, and to be completed in three months.

Separate offers will be received for the sewer pipes.

Plans, profiles and specifications may be seen at the office of the Town Hall, Saskatoon, on and after April 13th.

No tender necessarily accepted.

WILLIS CHIPMAN, Chief Engineer,
103 Bay Street, Toronto, Ont.
ADAM TURNER, Secretary-Treasurer,
SASKATOON, SASK.

CONTRACTS OPEN.

PORT ARTHUR, ONT.—The plans for the new hospital building have been submitted to the Board.

SYDNEY, N.S.—D. M. Curry will receive plans from architects up to April 14th for a new jail building.

GANANOQUE, ONT.—S. McCannon will receive tenders up to April 3rd for labor for laying of sewers.

SARNIA, ONT.—The Imperial Oil Works are preparing to rebuild the grease plant recently burned.

DRESDEN, ONT. — Tenders have been taken for the erection of a Canadian Bank of Commerce building.

CAYUGA, ONT.—J. W. Sheppard will receive tenders up to March 31st for $5,000 5 per cent. town debentures.

DEER PARK, ONT.—It is reported that Dr. Armstrong will erect new houses on his property east of Yonge street.

EAST EDMONTON, ALTA.—P. W. Johnston will receive tenders up to May 1st for erection of school house here.

EGLINTON, ONT.—The members of the Masonic Lodge are discussing the building of a society hall for the town.

KINGSTON, ONT.—Queen's Alma Mater Society have decided to build a gymnasium to cost $6,000.

AMHERST, N. S.—The congregation of the Methodist church have decided to build a new church to cost about $35,000.

CARNDUFF, SASK.—A Telephone Company is being formed to install a plant here. W.T. Lockhart is interested.

ST. MARY'S, ONT.—L. Harstone, Town Clerk, will receive tenders up to April 9th for $16,912.35 town debentures.

EAST TORONTO, ONT.—Plans for the new market building have been prepared and tenders will soon be called for.

SACKVILLE, N.B. — The Tribune Company are having plans prepared for a printing office and dwelling on Main street.

REGINA, SASK.—It is understood that the City Council will be asked to grant a site for a large modern rink building.

BROCKVILLE, ONT. — B. Dillon, architect, will receive tenders up to April 5th for erection of a residence for W. E. Braund.

THESSALON, ONT.—Mr. Williams, Police Magistrate, intends building a residence, corner Water and Government streets.

WOODSTOCK, N. B.—At the meeting of the County Court, Judge Carleton recomended the building of a court house here.

CAMPBELLFORD, ONT. — The Trustee Board of the Methodist church are taking subscriptions for a new church building.

FENWICK, ONT. — Angus Brown will erect a residence here.—M. J. Slough, of St. Catharines, is preparing to build two houses.

RENFREW, ONT.—The Board of Education are considering building an addition to the Collegiate Institute, cost about $10,000.

ENDERBY, B.C.—Mr. Hinton, of the Hinton Electric Company, Vancouver, has plans for an electric light plant for this place.

PICTON, ONT.—W. S. Benson will receive tenders up to April 5th for construction of cement basement and barn for House of Refuge.

WOLFVILLE, N.S.—J. D. Chambers is interested in a proposed dam across the Cornwallis river from this town to Starr's Point.

MONCTON, N.B. — The Maritime Power & Tramway Company are seeking incorporation to build an electric railway from this town to Amherst, N.S.

NIAGARA, FALLS, ONT. — The Electric Light Committee of the City Council will submit a by-law to raise funds for the extension of their railway lines.

KINGSVILLE, ONT.—John Lanner will receive tenders up to April 5th for building a Methodist parsonage. Plans with O. C. Wigle. T. Jenner, architect.

LONDON, ONT.—The London Loan Company, of Richmond street, have purchased the Oddfellows block and will have it remodelled for an office building.

PEMBROKE, ONT.—N.J.Ker, C.E., of Ottawa, has submitted plans for the new intake pipe for the town waterworks. The pipe is to be extended into deep water.

PORTAGE LA PRAIRIE, MAN.—S. F. & W. A. Peters, architects, Winnipeg, will receive tenders up to March 31st for erection of residence for J. D. Irvine.

ST. JOHN, N. B.—The property No. 367 Main street has been purchased by the Bank of New Brunswick on which they will erect a building for the north end branch.

STURGEON FALLS, ONT.—Robert J. Murday will receive tenders up to April 3rd for addition to public school. Plans also at office of H. W. Angus, architect, North Bay.

TORONTO JUNCTION, ONT.—J. A. Ellis, architect, is preparing plans for brick house and stable for Mr. McCormick.—W. J. Sheppard will erect a building on Dundas street.

GODERICH, ONT. — Mrs. A. J. Moore will build a house south of the old Garrow block.—Rev. Dr. McLean, Blyth, Ont., will build a two-story dwelling on Bruce street.

CRANBROOK, B.C. — The King Lumber Mills, Limited, have decided to erect a large planing mill.—The Baker Lumber Company will erect a mill near the mouth of the Elk river.

OAKVILLE, MAN.—W. H. Burns will receive tenders up to March 31st for the erection of a frame school house. Plans at office of above named and the Royal Municipality, Portage la Prairie, Man.

SELKIRK, MAN.—H. W. Newton will receive tenders up to April 3rd for erection of a brick school house here. Plans with H. Bird or William Fingland, architect, 490 Main street, Winnipeg.

LOCHALSH, ONT.—Tenders will be received up to April 12th for the erection of a brick church for Ashfield Presbyterian congregation. Plans with A. P. Stewart, of Lucknow, and F. D. McLennan.

POPLAR, ONT.—John Wilkinson wants tenders by April 16th for building a stone school house in the township of Mills, Manitoulin Island. Plans at office of Forster & Clark, architects, Owen Sound.

OWEN SOUND, ONT.—The Council have fixed April 2 th for voting on by-law to raise $45,000 each for gas works and electric light extensions.—J. A. Ellis, architect, Toronto, is preparing plans for a house for E. J. Harrison.

WELLAND, ONT.—O. H. Garner is asking for tenders for several houses to be erected on his Asher property.—Thomas Nichols, architect, Niagara Falls, has prepared plans for the new Baptist church, brick, 35 x 77 feet.

WESTMEATH, ONT.—George A. Tucker will receive tenders up to April 6th for the building of a Methodist parsonage here. Plans at his office or with William Beatty, Pembroke, and after the 30th inst. with Norman Reid.

BRANTFORD, ONT.—W. B. Burrill & Company, foundrymen, have decided to erect a new factory on Grey street. Stewart & Taylor, architects, are preparing plans.—The by-law to provide $140,000 for surface drainage has been defeated.

HAMILTON, ONT.—The Sawyer-Massey Company are planning to erect a large warehouse on Wellington street.—The City Council will purchase a new asphalt mixer to oost $2,800.—A by-law has been passed to issue $60,000 debentures for waterworks improvement.

QUEBEC, QUE. — The following building permits have been issued: P. Berthaiume, brick building on Fleurie street, and E. Nadeau and A. Frannette, contractors, brick building on Henderson street.—The Grand Trunk Railway has purchased a site corner of Ste. Anne and Du Fort streets for office buildings.

ESKASONI, N. S.—Tenders will be received by Fred Gelinas, Department of Public Works, Ottawa, Ont., up to April 9th for the construction of a pile-wharf here. Plans at the office of C. E. W. Dodwell, resident engineer, Halifax, N. S., E. G. Millidge, Antigonish, N.S., at post office here and at the offices named above.

BRANDON, MAN. — The congregation of St. Pauls Presbyterian church have bought a site, corner Lorne avenue and Dennis street, on which to erect a Mission church. — H. Walker, Box 549, will receive plans and specifications from architects, up to April 10th, for an 8-room public school and an 8-room Collegiate school, with full basement under each.

OTTAWA, ONT. — The Bank of Ottawa purpose erecting a six-storey building, corner Bank and Gloucester streets.—The Civic Property Committee will have plans prepared for an addition to the city hall.—The directors of the Y. M. C. A. have bought a site, corner Metcalfe and Laurier avenue, for a new Institute building.

EDMONTON, ALTA.—Johnston & Barnes, architects, have prepared plans for a three-storey building for the Credit Foncier, corner Jasper and Third streets; cost $30,000.—The German Lutheran congregation have decided to erect a church at corner of Picard and Kenostio streets.— The Alberta Hotel Company will remodel the Alberta hotel.

CALGARY, ALTA. — The plans of Hodgson & Bates, architects, for the new Y. M. C. A. building, have been accepted. It will be a three-storey brick structure 60 x 120 feet.—The British Columbia General Contract Company are asking for tenders for sub-contract for the grading of 80 miles of the C. P. R. between Strassburg and Saskatoon.

WEYBURN, SASK. — The Public School Board is arranging to issue $20,000 debentures for the erection of an 8-roomed school house.—E. S. Connant & Sons, Halbrite, Sask., have purchased the Waverley Hotel and will have it remodelled at cost of $10,000.—The Weyburn Hardware Company will erect a block this year, cost $10,000.—J. A. Mitchell has plans for a two storey block 52 x 60 feet on Main street.

VICTORIA, B.C.—W. W. Northcott will receive tenders up to April 2nd for supply of water meters. Specifications at his office, city hall.—Tenders will be received by the Deputy Minister of Marine and Fisheries, Ottawa, up to April 17th for the lighthouse buildings on Trial Island. Plans at the offices of the Agency, Victoria, at the post offices, Vancouver and Nanaimo, and at the Marine Department, Ottawa.

MEAFORD, ONT.—James Butchart will build a residence on Trowbridge street.—Alex. J. Douglas will erect a brick house on Cook street. — George Dyce will build several houses on St. Vincent street.—The by-law was carried to guarantee a loan to the Georgian Bay Milling & Power Company for extension of their works.—G. G. Albery will receive tenders up to March 31st for purchase of $1,600 4 1/2 per cent. school debentures.

PETERBORO, ONT.—The plans for the new firehall are nearly completed and tenders will soon be invited.—The Board of Health will ask the Provincial Inspector for plans for an Isolation hospital.—Wm. Blackwell, architect, is preparing plans for the new school building, for which tenders will soon be invited.—The Railway Committee have passed a bill empowering the Peterboro Radial Railway Company to extend their line from Clear Lake to Stony Lake.

NEW WESTMINSTER, B. C.—A. E. Henderson, architect, Vancouver, has plans prepared for Mallin's & Colthard's new block, corner Columbia and Sixth streets, cost about $15,000.—Assurance has been given by an official of the V. W. & Y. Railway that a new station will be soon erected here.—It is understood that John Chappell, proprietor of Occidental Hotel, has an option on the property occupied by William Cumming on which

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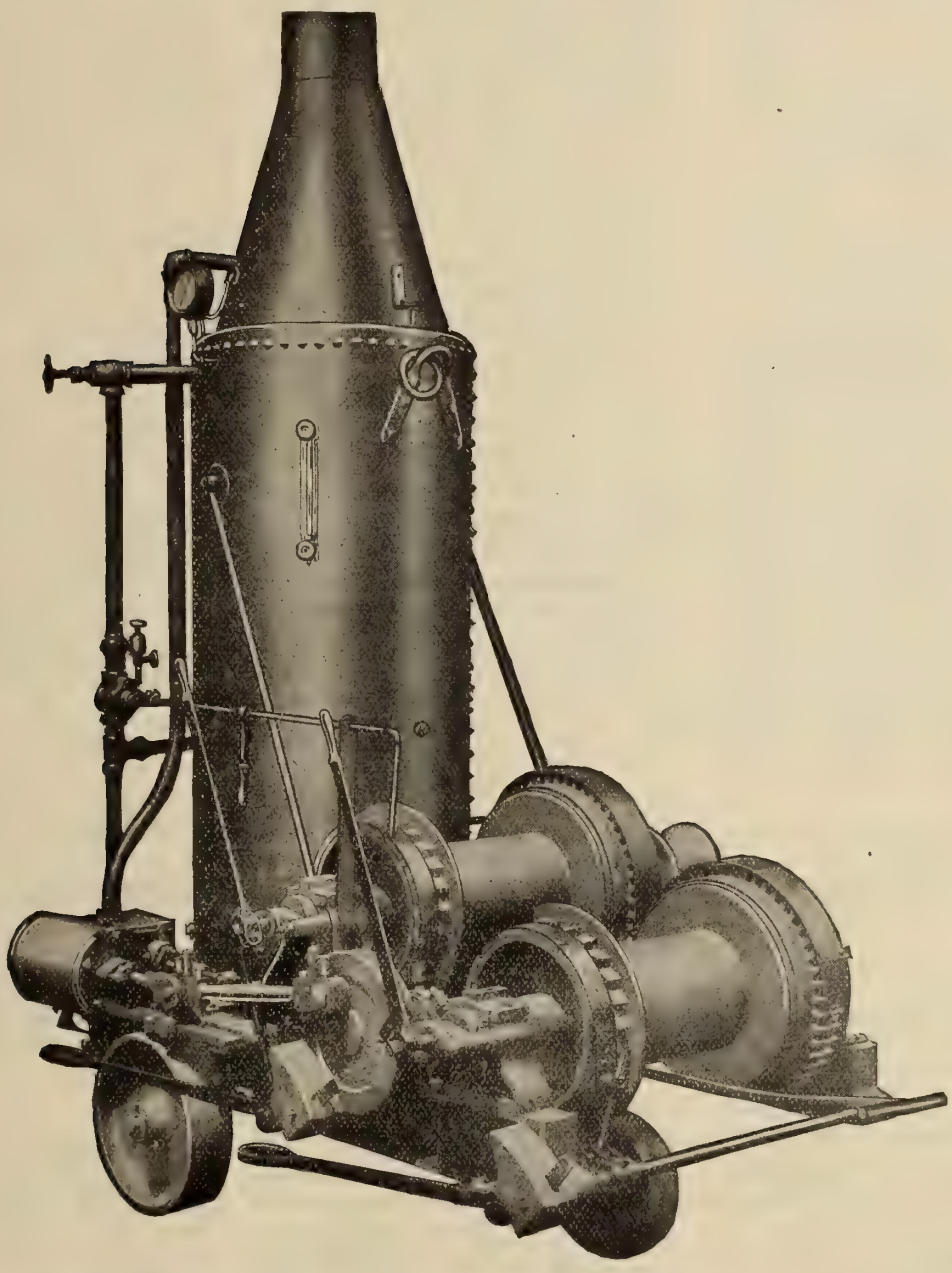

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he purposes to build an addition to his hotel.

STRATFORD, ONT.—Building permits have been issued as follows: J. D. Woods, storehouse on South street; Mrs. D. Halpin, residence, Ontario street; S. Seldon, residence, Rebecca street; R. Offord, residence, Water street; Wm. Elligsen, residence, Centre street.—The Mooney Biscuit & Candy Company intend enlarging their factory, corner of Downie and Milton streets.—William Lawrence will receive tenders up to March 30th for $115,229 4½ per cent. city debentures.

VANCOUVER, B.C.—A new building for the Children's Aid Society will replace the one burnt on Davie street.—Honeyman & Curtis, architects, have prepared plans for a new church for St. John's congregation, corner of Broughton and Comox streets, to cost $50,000.—Sullivan & Considine are making arrangements for the erection of a new theatre to replace the People's theatre; cost about $100,000.—The British Columbia Sugar Refining Company will build a large six story warehouse, cost about $60,000.

MONTREAL, QUE. — Tenders are being received for the Mark Fisher Sons & Company's new warehouse, corner Craig street and Victoria square. Alphonse Piche, architect.—Marchand & Maxwell, architects, have been asked to prepare plans for a Lookout building for the Mountain.—D. R. Brown, architect, has prepared plans for the new building for Desbartes & Company on Lagauchetiere street, to be five stories, brick, 65 × 108 feet, pressed brick with sandstone trimmings, low pressure steam heating, passenger and freight elevators, sprinkler system, etc.—Building permits have been granted as follows: Miss Rose Pepin, one house, brick and stone, Duluth ave., $3,000; A. Desroches, one house, brick and stone, St. Lawrence street, $5,000; Henri Lemieux, one house, wood and brick, St. Antoine ave., $4,250; Stanislas Lemieux, one house, wood and brick, St. Antoine ave., $4,250.—A new school will be built for St. Michael's parish. M. J. Walsh, M.L.A., is interested.

WINNIPEG, MAN.—J. C. McGreevy and W. J. Donovan have sold the building on Market street occupied by Tees & Persse, which will be reconstructed into a first-class hotel.—F. R. Evans is taking tenders this week for a residence on Dufferin avenue.—The Winnipeg Grain & Produce Exchange are asking for plans and tenders for their new building corner Lombard and Rorie streets. The date limit is April 10th.—James Fowler will have the Brunswick Hotel replaced by a steel building to cost $125,000.—Mrs. H. E. M. Crawford purposes building a residence on Roslyn road.—The Council have decided to purchase a site on Rupert street for the new police station.—J. H. Cadham, architect, has just taken tenders for erection of a brick and stone warehouse.—The Myers Iron Fence Company have purchased a site on Chambers street, Elmwood, on which they will erect a two-storey factory.—H. C. Stone, architect, has plans prepared for the new theatre building on Smith street for C. P. Walker. It will be a three-storey stone building, 185 × 84 feet, cost $175,000. Mr. Stone is also preparing plans for a store and hotel building on the adjoining site to cost $225,000.—John Woodman, architect, will receive tenders up to March 31st for construction of a brick and stone boiler and engine room, with brick chimney, for Hudson Bay Company.

TORONTO, ONT.—C. F. Wagner, architect, will receive tenders up to March 30th for the erection of a dwelling on Broadview avenue.—R. J. Edwards, architect, has taken tenders for a brick house on Oriel avenue, also one on Woodlawn avenue.—Copeland & Fairbairn, real estate agents, have recently sold property on Kendall avenue to Sidney Small on which several fine residences will be erected. They also have sold a site on Jamieson avenue to W. B. Ecclestone, of the T. Eaton Company, on which he will build a residence. The same dealers have sold the property at 55 St. Vincent street to A. Rafelman, of Ottawa, who will build a large apartment house thereon.—Sexton & Company, contractors, have purchased property on Teraulay street on which to build a large wood-turning factory. — A. R. Denison, architect, is preparing plans for rebuilding the McCann Milling Company's buildings recently burned, cost about $250,000.—Lawrence Shea, of the Windsor Hotel, will erect a large hotel on the northwest corner of Church and Richmond streets.—The James Bay Railway Company are procuring property near the Don, between Eastern avenue and Front street, for a site for large freight sheds.—The Board of Control have authorized the extension of the palm house in Allan Gardens, at a cost of $2,500.—City Engineer Rust has been instructed to prepare a plan for Bathurst street bridge for the extension of street car lines to Exhibition grounds.—The Civic Island Committe have recommended a new bath house for the Island to cost $5,000.—Tenders will be received by the Board of Control up to April 3rd for construction of the following asphalt pavements: Northcote avenue, from Queen street to Afton avenue, and on John street from King to Queen; bitulithic pavement, Casimir street from St. Patrick to 193 feet north, and on Park road from Bloor street to Collier; tar macadam pavement, Bartlett street from Bloor to the north city limit; vitrified block track allowance on River street from King to Queen; also a number of concrete sidewalks.—An option has been secured on property near Toronto University as a site for a new Knox College.—The property at 56 and 58 Yonge street has been purchased by John Hines, who intends to reconstruct the buildings for hotel purposes. Plans are now being prepared.—J. A. Ellis, architect, is preparing plans for three stores on Bloor street for Waite & Griffith, and for houses on St. Clarens ave., Crescent road, Woodlawn ave. and Broadview ave. He also has plans for a white goods warehouse, to cost $40,000.—F. S. Baker, architect, is preparing plans for a tobacco store in the new Traders' Bank building for G. W. Muller.—The Bank of Montreal have purchased the property at 173 to 175½ Yonge street, on which it is understood they will soon erect a first-class bank building. — Building permits have been issued as follows: S. Caldecott, 2-story and attic brick dwelling, Woodlawn ave., near Yonge street, cost $4,500.—T. Cruttenden, 2½-story brick dwelling, Broadview ave., near Wolfrey, cost $5,500; Mrs. Jean Grafton, pair 2½-storey brick and stone dwellings, Rathnally ave., near Cottingham street, cost $6,000; D. H. Atkinson, pair 2-storey brick and stone dwellings, 6 and 8 Atkins ave., cost $4,000; C. H. Rudd, 2-storey brick and stone dwelling, Crawford street, near Queen, cost $2,500; Mrs. K. Davidson, 2-storey brick dwelling, Barton ave., cost $3,000; J. J. Fraser, pair 2-storey roughcast dwellings, St. Clarens ave., near Wallace, cost $4,500; E. W. McNeill, 2½-storey brick dwelling, Springhurst ave., near King street, cost $4,000; T. J. Dolan, 2-storey stone and brick store and dwelling, Dundas street, near Dovercourt road, cost $2,750; Standard Bank, 2-storey brick and stone bank and dwelling, corner Yonge and Charles streets, cost $3,000; Charles Bulley, pair 2-storey brick dwellings, 29-31 Withrow ave., cost $5,000; Charles Bulley, 2-storey and attic brick dwelling, No. 27 Withrow ave., cost $2,400; J. Martin, pair 2-storey and attic stone and brick dwellings, Dovercourt road, near Bloor street, cost $5,000; Dawson & Chipchase, 2-storey brick and stone dwelling, Belmont street, near Davenport road, cost $2,800; John Marr, pair 2 1/2-storey brick and stone dwellings on Conduit street, cost $4,400; Wm. L. Rome, three 2 1/2-storey brick and stone dwellings O'Hara ave., near Queen street, cost $6,000; J. A. Hogarth, 2-storey brick dwelling, Hogarth ave., near Broadview, cost $2,500; Wm. Hogan, 2-storey and attic brick dwelling, Macpherson ave., cost $3,000; T. J. Madill, 2-storey and attic brick dwelling, Summerville ave., cost $3,300; C. Scadding, 2-storey and attic brick store, corner of Leuty ave. and Queen street, cost $3,400; John S. Lucas, 3-storey brick store, Queen street, near Victoria, cost $10,000; Mrs. F. B. Whittemore, 2-storey brick dwelling, Hawthorne ave., near Dale, cost $3,500; T. Gibson, pair 2-storey brick dwellings, Lansdowne ave., near Bloor street, cost $4,000; A. M. Grantham, 1-storey and basement brick dwelling, Balmoral ave., near Poplar Plains road, cost $6,000; R. Saunders, pair 2-storey and attic brick dwelling, Concord ave., near Northumberland street, cost $5,000; J. C. Scott, 2½-storey brick dwelling, Hawthorne ave., near Elm, cost $5,000; J. Wallace, 2-storey and attic brick dwelling, Close ave., near Springhurst, cost $6,000; James Cairns, 2-storey stone and brick store and dwelling, 1289 Bloor street, cost $3,000; J. T. V. May, 2½-storey stone and brick dwelling, Sherbourne street, near South Drive, cost $5,000; W. E. Booth, pair 2½-storey brick dwelling, Gibson ave., near Yonge street, cost $5,000; E. G. Switzer, pair 2-storey brick dwelling, Grace street, near Arthur, cost $4,000; Telfer Mfg. Co., 3-storey and basement brick factory, Pearl street, near Duncan, cost $18,000; Mrs. J. K. Piper, pair 2½-storey brick and stone dwellings, 176-178 Spadina road, cost $7,000; H. Larkin, pair 2½-storey brick and stone dwellings, Earinbridge street, near Brock ave., cost $5,000; James Burford, pair 2½-storey brick dwellings, Bathurst street, near Dupont, cost $5,000.—The Board of Control will receive tenders up to April 17th for the construction and supply of seven steel pontoons and seven wooden pontoon; also up to May 2st for the supply of cast steel pipes and specials, cast iron specials, pipes and castings for high pressure fire system.

CONTRACTS AWARDED.

ARNPRIOR, ONT. — Shirt factory building: S R. Rudd, contractor.

GUELPH, ONT.—Sewer pipe for city: Francis Hyde & Company, Montreal, Que.

WELLAND, ONT.—Store building, corner Muir and Park streets: W. A. Kelsey, contractor.

ANTIGONISH, N. S. — Building for Royal Bank of Canada: Rhodes, Curry & Co., contractors, Amherst, N.S.

INVERNESS, N.S.—Roman Catholic church: Dixon & Falconer, contractors, Sydney, N. S.; cost $15,000.

HUNTSVILLE, ONT.—W. Duperow's dwelling: Carpenter work, Ira Boadway; material, Irons & Winnacott.

AYLMER, QUE.—Victoria Yacht Club at Queens Park: Carpenter work, H. Bheaumeo. M.C. Eddy, architect.

DIDSBURY, ALTA. — The Corporation has purchased a double cylinder "McRobie" chemical fire engine.

OWEN SOUND, ONT. — $49,574.76 4 per cent. town debentures: Dominion Securities Corporation, successful tenderers.

LACOMBE, ALTA.—Cash Bros. have secured a sub-contract for construction on the G.T.P.R. about 110 miles east of this town.

MORRISBURG, ONT.—Installation of electrical development plant: William Birmingham, contractor, Ottawa, Ont., cost $73,600.

REGINA, SASK.—Post office building: Shyder Bros., contractors, Portage la Prairie, Man.; cost $170,000. Portage brick will be used.

VICTORIA, B. C.—British Columbia Railway Company's offices, corner Fort and Langley streets: Thomas Catterall, contractor; F.M. Rattenbury, architect.

PORT ARTHUR, ONT.—It is reported that the Empire Elevator Company have let the contract for a 3,000,000 bushel elevator to Barnett & McQueen.

PORTAGE LA PRAIRIE, MAN.—Dagg & Robertson, Winnipeg, have the contract for clearing and grading of the Midland Railway from this town to Carman.

NIAGARA FALLS, ONT.—The contract for the cut stone on the river front at the power house for the Electrical Development Co. has been let to the Roman Stone Co., Ltd., Toronto. E. J. Lennox, architect.

SASKATOON, SASK.—The British Columbia General Contract Company have the contract for construction of an eighty-mile extension of the Pheasant Hills branch of the C.P.R. from Strassburg to this town.

OTTAWA, ONT.—Sewer pipe supply: Ottawa Fire Proof Supply Company, Scotch pipe, at $1,945.30.—Waterworks Committee have decided to give the contract for hydrants and valves to the Kerr Engine Company, of Walkerville.

FORT WILLIAM, ONT. — Grand Trunk Pacific dock: Barnett & McQueen, contractors. — W. R. Lewis' building, corner of Ogden and Simpson streets: Russell Bros., contractors.—The contract for clearing and ditching the mission property for the terminals of the G. T. P. has been given to Gibson, Hogan & Beagle, contractors, Port Arthur, cost $55,000.

MONTREAL, QUE.—Civic supplies: Cement, W. McNally, Hercules brand at 59 cents per cwt., and A. Bremner, Crescent at 55 cents; castings, Canadian Iron & Foundry Company, at $2.35 per cwt., cast iron gullies, $19 each, and manhole covers at $15.60 each; bricks and squares, Hyde & Webster and Stinson, Reeb Company, at $10.50 per thousand and for bevels at $13; flagstone sidewalks, F.D. Lawrence.

VANCOUVER, B. C. — Hudson Bay Company's building, corner Grenville and Georgia streets: George Snider, contractor, Victoria, B.C.—Block paving on Seymour street: Armstrong & Morrison, contractors.—British Columbia Telephone Company's exchange building on Seymour street: Baynes & Horie, contractors.—Chinese Methodist Mission building on Beatty street: Snider & Company, contractors; cost $12,000. Hooper & Watkins, architects.—Series alternating arc lamps: Canadian General Electric Co.; cost $20,000.

WINNIPEG, MAN.—Brick residence for Mr. Bissett in Crescentwood, Fort Rouge: Campbell & Cox, contractors, cost $7,500.—Pulford block, Donald st.: Charles Angle, contractor.—J. D. McArthur has the contract for construction of fifty miles of track on the C. P. R.-Wolseley-Reston branch, a distance of forty miles, and Winnipeg beach extension to Gimli, a distance of ten miles.—Enlargement of McIntyre block, Main street: Robert Watson, contractor; J.A. Cadham, architect.

TORONTO, ONT.—Galvanized iron work on high level pumping station: Wheeler & Bain.—Slate roof work on high level pumping station and galvanized iron work on Ferry buildings: Asa Matthews.—Vault fittings in Western division regis-

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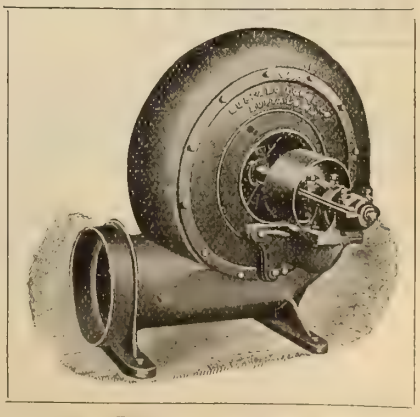

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try office: Office Specialty Company.—Sewers: Grace street, Toronto Contracting & Paving Company; Shaw street from Bloor to Dupont, John F. Connolly.—The Board of Control have awarded the following contracts: Asphalt pavements—Hackney street, Wellesley to St. Patrick, Barber Asphalt Company, $4,686; Rusholme road, Hepbourne to Bloor, Barber Asphalt Company, $2,875; Yonge street, King to Queen, Barber Asphalt Company, $4,970. Asphalt block pavement—Millstone lane, York to east end, City Engineer, $2,139. Brick pavements — Kintyre avenue, Broadview to Grant, John McGuire, $1,648; Pearl street, Simcoe to Duncan, City Engineer, $3,653. Macadam roads—Park road, Collier to South Drive, Constructing & Paving Company, $4,970. Cedar block pavements—Bloor street, Bathurst to Dufferin, Constructing & Paving Company, $20,790.—The contract for cut stone for the Ossington ave. Baptist church has been awarded to the Roman Stone Co., Ltd. J. Francis Brown, architect.

BUSINESS NOTES.

The firm of Stinson & Hay, builders, Nanton, Alta., has been dissolved.

The business of J. B. Trottier, contractor, Montreal, has been registered.

The firm of Bertrand & Bernier, plumbers, Montreal, Que., has been dissolved.

The business of Albertine Riopel, contractor, Montreal, has been registered, under the name of D. Riopel & Company.

Joseph Savage and Alphonse Lecoq, contractors, Montreal, have registered under the firm name of Savage & Lecoq.

Henri Pitchette and Palma Belair, plumbers, Therville, Que., have registered their business under the name of Pitchette & Belair.

Albert Belanger and Arthur Messier, plumbers, Montreal, have registered their business under the firm name of A. Messier & A. Belanger.

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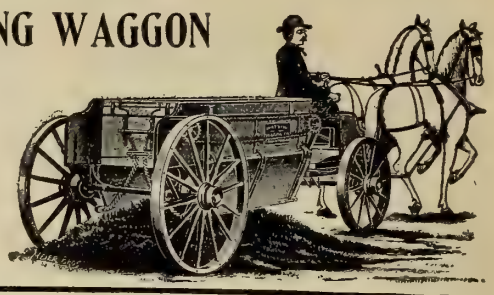

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ESTIMATES FOR PUBLIC WORKS IN ONTARIO.

The estimates of the Province of Ontario for the year ending December 31st, 1906, were presented to the Legislature recently. Among the larger appropriations for public buildings are the following:

Toronto Asylum—Interior repairs and alterations to cold storage, furniture and furnishings, $2,000; machinery and repairs for carpenter and shoe shop, laundry and kitchen, etc., $2,700.

Mimico Asylum—Repairs to drains and subway, $1,000; electrical wiring and improvements in telephone system, $1,000; exterior repairs to buildings and alterations and material for carpenter and coal vault and improvement in water supply, $5,600; reconstruction of Cottage A, damaged by fire, $7,000; underfeed stokers, $2,850.

London Asylum—Electric light plant and wiring, $7,000; exterior repairs and improvements, $1,100; fire escapes (North building), $500; fire protection, hose, hydrants, etc., $300; interior repairs and alterations, furniture and furnishings, $1,000; railway switch into grounds, $1,500.

Hamilton Asylum—Paint shop, $1,800; enlarging steam mains, $2,500; renewal boilers, $3,600; exterior repairs and improvements and cement walks, $1,350; main sewer iron pipe, $2,000.

Kingston Asylum — Industrial building material, $3,000; new silo, $1,000; repairs to wharf and breakwater, $2,000.

Brockville Asylum — Radiators main building and cottages, new boiler, steam main and connections, $1,500; hot water boiler for cottages, $1,500; fire escapes main building, $500.

Penetanguishene Asylum—Addition to laundry, $2,500; machinery and repairs for kitchen, laundry and farm, $500; root house and silo, $2,000.

Woodstock Asylum—Two cottages for 40 patients each, $48,600; water supply, $4,200; sewage, $7,500; roads and walks, $4,900; electric light and power, $1,000; fire protection, hose, etc. (part revote), $1,000; barn and stables, $5,000; furniture and furnishings, $10,000.

Central Prison—Boiler for north shop, $1,500; electric lighting, wiring, etc., $1,500; turn-table and repairs and renewals for railway siding, $2,500.

Osgoode Hall additions, $35,000.

Normal and Model Schools, Toronto—Ventilation, $4,000.

School of Practical Science—Windbreak to ventilators, $225; completing services, fittings, etc., chemistry and mining building, $7,175; furniture and equipment, $4,310; fire protection apparatus, $1,120; laboratory apparatus, instruments and appliances, $22,800.

Deaf and Dumb Institute, Belleville—Engine for laundry, etc., $1,200; cement walks, crossing, etc., $1,000.

Institution for the Blind, Brantford — Change in heating, $3,000; new ice house, $1,000; cement walks and steps, $1,200.

Ontario Agricultural College, Guelph—Steel tank and tower for 50,000 gallons of water to supply College and Macdonald Institute and Hall, $5,700; additional apparatus for five laboratories, $2,500; apparatus and furnishings for farm mechanics building, $2,000; addition to chemical laboratory, $7,000; rebuilding and repairing College greenhouses, $5,000; building for farm mechanics and instruments, $33,095.

The grants for bridges include the following: Bridge over Indian River, Port Carling, $800; extension of wharf at Port Carling, $2,000; Goulais river bridge, $4,500; Sauble river bridge, Massey, $3,700; Spanish river bridge, $7,500; Vermillion river bridge, Township of Hammer, $800; Veuve river bridge, Vernier, $4,500; Wright's Creek bridge, Temiskaming, $800; North Road bridge, Township of Dymond, $2,000; Mattawa bridge, $9,800; Whitestone bridge, McKenzie Township, $1,500; Manitowaba bridge, McKellar Township, $800; Bala bridge, $3,000; Canard river bridge, $1,000; Big East River bridge, to complete, $800; La Mable bridge, Dungannon Township, $700; Beaver Creek bridge, $1,000; Draper bridge, $500; Madawaska river bridge, $3,000.

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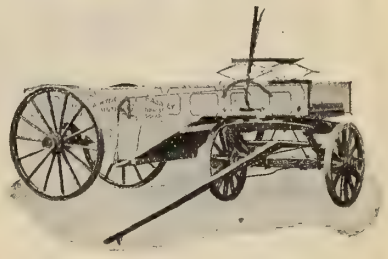

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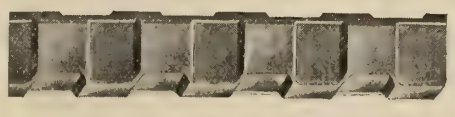

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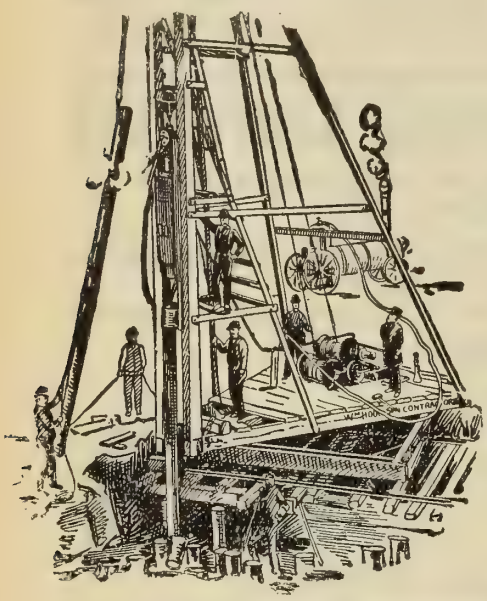

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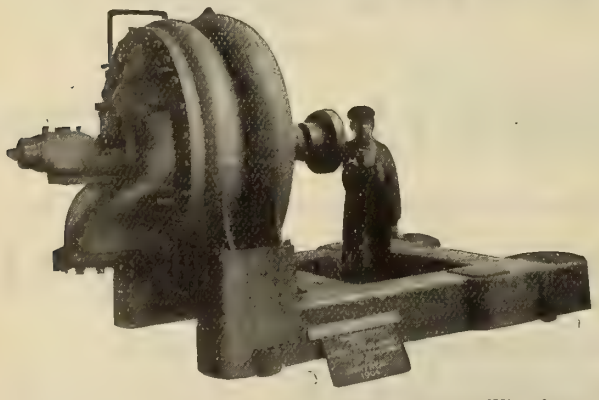

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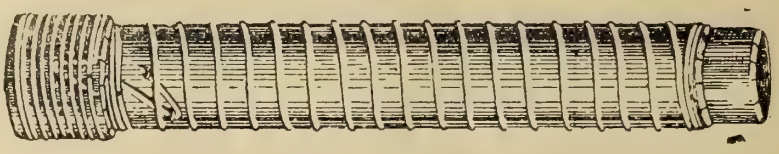

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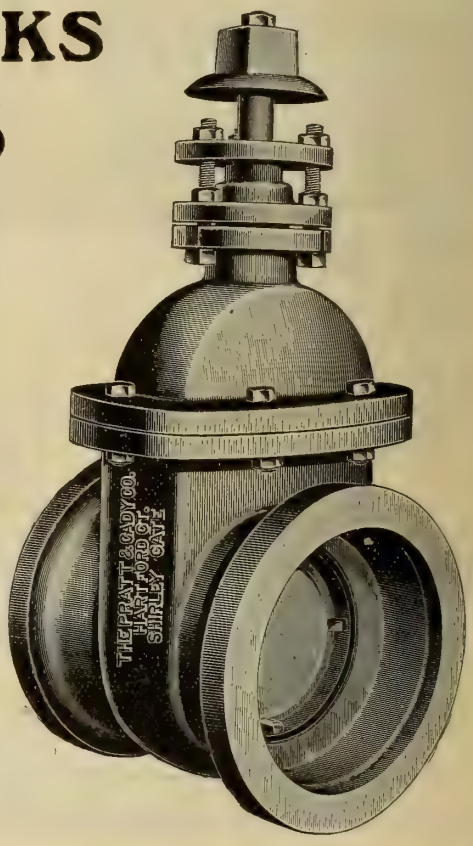

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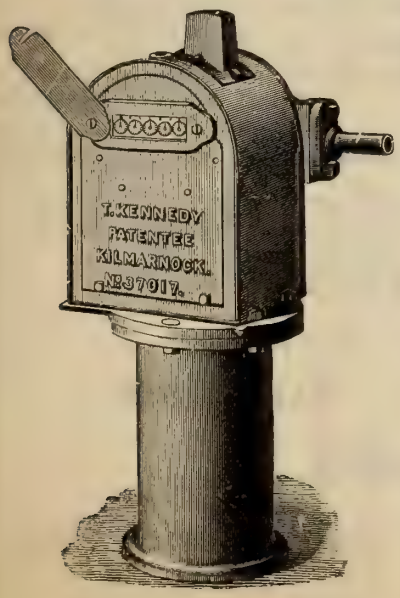

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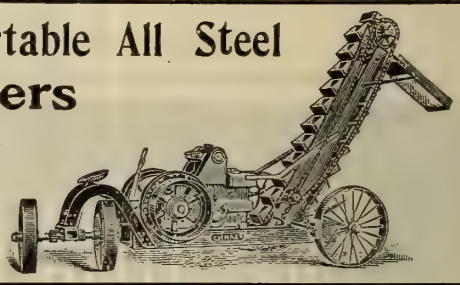

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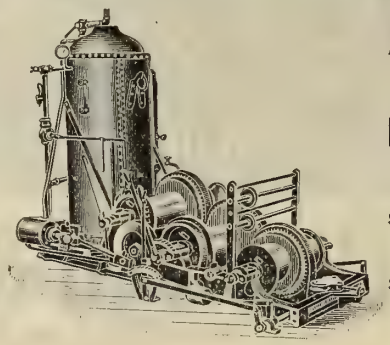
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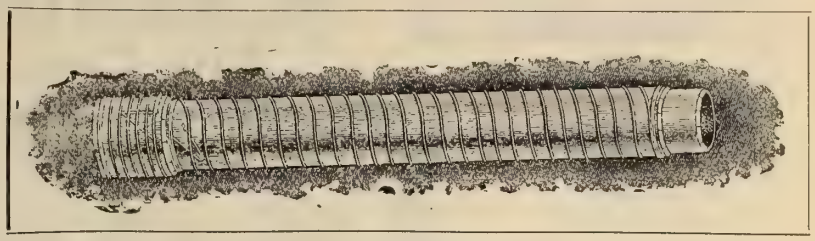

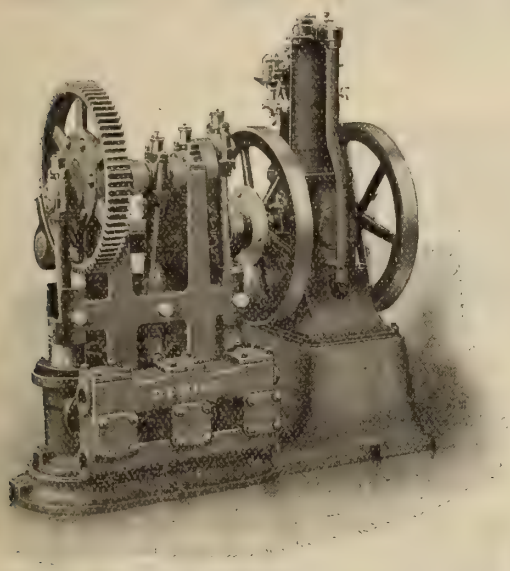

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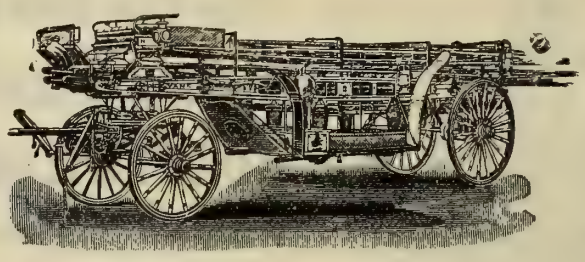

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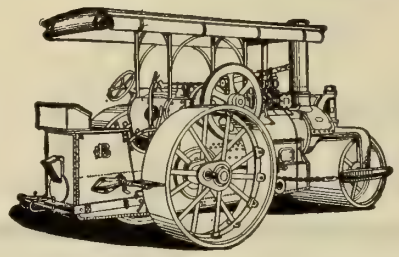

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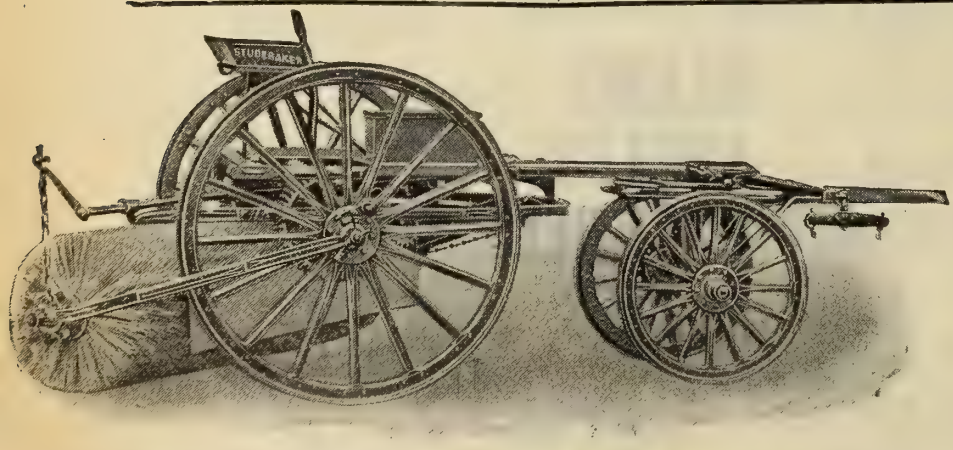

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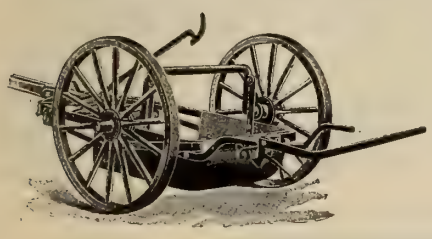

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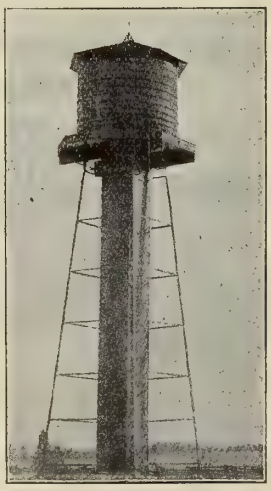

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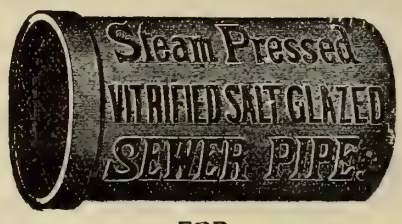

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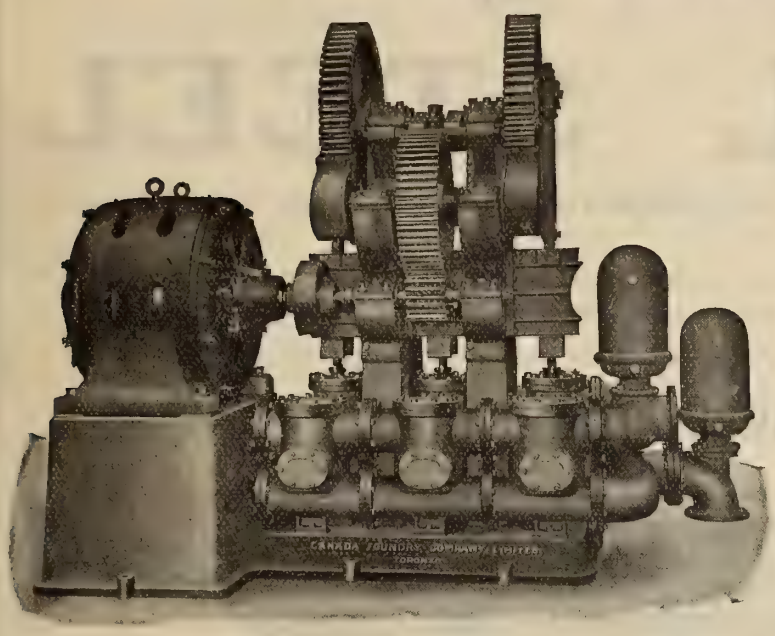

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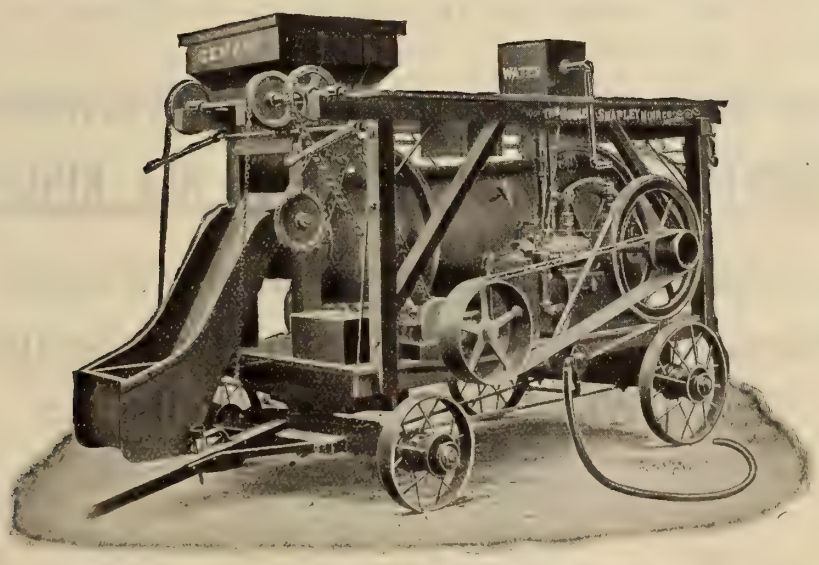

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CANADIAN

Contract Record

A Weekly Journal of Public Works, Tenders, Advance Information and Municipal Progress

This Paper Reaches Every Week the Town and City Clerks, Town and City Engineers, County Clerks and County Engineers, Purchasers of Municipal Debentures and Leading Contractors In All Lines Throughout Canada

VOL. 17. TORONTO, MONTREAL — APRIL 4, 1906 — WINNIPEG, VANCOUVER No. 5

THE CANADIAN CONTRACT RECORD
PUBLISHED EVERY WEDNESDAY
As an intermediate Edition of the Canadian Architect and Builder.

THE C. H. MORTIMER PUBLISHING COMPANY
of Toronto, Limited,

Subscription Price, $2 per annum, payable in advance.

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TENDERS FOR STEEL BRIDGES

Sealed tenders will be received by the undersigned up to noon on MONDAY, APRIL 9TH, for the erection of a 90 ft. span, 14 ft. roadway, Warren truss steel bridge over the Teeswater river, side line 5 Township of Greenock, and also for the erection of of a 110 ft. span steel bridge over the Teeswater river, con. 8 Greenock. Floor of bridges to be 4" cedar. Bridges to be so constructed and of sufficient strength that concrete floor may be put on. Parties tendering are required to submit plans and enclose marked cheque for 10% of amount of tender. Tenders will be considered by Township Council at Chepston on April 9th.

J. J. DONNELLY,
Clerk Township Greenock,
Pinkerton P. O., Ont.

March 14th, 1906.

Tenders Wanted

Sealed tenders will be received by the undersigned up to eleven o'clock a.m., of SATURDAY, APRIL 14TH, 1906, for the erection of a Presbyterian Church at McDonald's Corners, to be built of cement concrete blocks.

Plans, specifications, etc., may be seen and all other information obtained at the office of Henry P. Smith, Architect, Kingston, Ont., and at the office of John G. Barr, Merchant, McDonald's Corners, Ont.

Tender may be made for the whole work or for separate portions and must be accompanied by a marked cheque for 5% of the amount of tender, which will be returned in case of non-acceptance.

The lowest or any tender not necessarily accepted.

WALTER GEDDES,
Secretary of the Committee,
Dalhousie Lake, Ont.

SEALED TENDERS

will be received up to 12TH APRIL, 1906, inclusive, for the following:

1. Residence, upper end of Palmerston Ave.
2. Sunday School on Crawford Street.

The lowest or any tender not necessarily accepted.

G. M. MILLER & CO.
Architects,
Toronto General Trusts Building.

High Pressure Fire System

Tenders will be received, by registered post only, addressed to the Chairman of the Board of Control, City Hall, Toronto, Canada, up to noon on TUESDAY, MAY 1ST, 1906, for the supply of Cast Steel Pipes and Specials, and also for the Cast Iron Special Pipes and Castings required for the High Pressure Fire System.

Envelopes containing tenders must be plainly marked on the outside as to contents.

Plans and specifications may be seen and forms of tender obtained at the office of the City Engineer, Toronto, Canada.

The usual conditions relating to tendering, as prescribed by the city by-law, must be strictly complied with.

The lowest or any tender not necessarily accepted.

E. COATSWORTH, (Mayor),
Chairman Board of Control.

City Hall, Toronto, March 23, 1906.

TENDERS FOR House of Refuge

Sealed tenders for House of Refuge, on site near Belleville, in County of Hastings, will be received by the undersigned up to noon of the 17TH DAY OF APRIL, 1906, for whole building or for each kind of work, according to plans and specifications, namely:—

1. Bulk tender for whole building.
2. Mason, Brick and Plaster work.
3. Heating, Plumbing and Metal work.
4. Carpenter and Joiner work.
5. Painting and Glazing work.

Plans and specifications may be seen at the office of the County Clerk, Belleville; or at the office of G. M. Miller & Company, Architects, Toronto.

Approved security for the satisfactory completion of whole building by 1st August, 1907, will be required of contractor.

If separate contracts for the different kinds of work are made each kind of work must be done in time for the whole building to be finished as aforesaid.

The lowest or any tender not necessarily accepted.

WM. R. AYLESWORTH,
County Clerk,
Belleville.

Shire Hall, March 15th, 1906.

SASKATOON, SASK.

NOTICE TO CONTRACTORS

Tenders will be received by the Secretary-Treasurer until 7 p.m. TUESDAY, APRIL 24TH, 1906, for constructing about 10,000 lineal feet of tile sewers in the Town of Saskatoon.

Work to be commenced on May 1st, and to be completed in three months.

Separate offers will be received for the sewer pipes.

Plans, profiles and specifications may be seen at the office of the Town Hall, Saskatoon, on and after April 13th.

No tender necessarily accepted.

WILLIS CHIPMAN, Chief Engineer,
103 Bay Street, Toronto, Ont.
ADAM TURNER, Secretary-Treasurer,
SASKATOON, SASK.

TOWN OF INDIAN HEAD
PROVINCE OF SASKATCHEWAN

TENDERS FOR
WATER WORKS AND SEWERAGE

Contract "A"—All labor necessary for constructing the water works, supply main and distribution system and certain materials therefor.
Contract "B"—All labor for constructing sewerage system and certain materials therefor.
Contract "C"—All labor and materials for constructing a reservoir and dam at the Squirrel Hills.
Contract "D"—Supplying wood pipe and special castings and valves for wood pipe.
Contract "E"—Supplying cast iron pipes and special castings.
Contract "F"—Supplying fire hydrants and gate valves.
Contract "G"—Supplying vitrified tile pipes.
Contract "H"—Supplying cast iron manhole covers, catch basin covers, etc.
Contract "I"—Supplying Underwriter fire pump.

Sealed tenders will be received by the Secretary-Treasurer until 8 p. m. on TUESDAY, APRIL 17TH, 1906.

Plans and specifications may be seen and forms of tender obtained at the office of the Secretary-Treasurer, or at the head office of the Chief Engineer.

F. L. MACKAY, ESQ.,
Mayor.
C. J. GODFREY, ESQ.,
Secretary-Treasurer.
JOHN GALT, C.E. & M.E.,
Chief Engineer,
Toronto, Ontario.

[FOR ADDITIONAL ADVERTISEMENTS FOR TENDERS SEE NEXT PAGE.]

SEPARATE TENDERS

will be received by the undersigned up to 12 o'clock noon, FRIDAY, APRIL THE 6TH, for the Rubble Masonry, Concrete Walls and Drain Work in connection with a large Residence. Plans and specifications may be seen at the offices of the Architect. The lowest or any tender not necessarily accepted.

GEO. W. GOUINLOCK, Architect,
Suite 1108 Temple Building, Toronto.

Municipal Debentures
FOR SALE

The Town of New Liskeard is constructing a Water Works System and issuing Debentures therefor.
For particulars write

H. HARTMAN,
Clerk.

Tenders for Bridge

Sealed tenders, addressed "S. R. Armstrong, City Clerk, Peterborough, Ont., and endorsed "Tenders for Bridge," will be received up to 4 p.m.

Saturday, April 14th, 1906,

for the construction and completion of a Concrete and Steel Bridge of 30 feet clear span over the creek on Charlotte Street, Peterborough.
Parties may tender separately or combined for
(a) Concrete Abutments, Sidewalks and Reinforced Concrete Deck.
(b) Steel Floor System
in accordance with plans and specification which may be seen at the office of the undersigned on and after April 2nd.
Tenders must be accompanied by a marked cheque equal to 5 per cent. of estimated bulk sum of (a) Concrete Work, and for the sum of $75.00 for (b) Steel Work.
The lowest or any tender not necessarily accepted.

T. A. S. HAY,
City Engineer.

NOTICE TO CONTRACTORS

Tenders will be received, addressed to the undersigned and marked "Tender for Trenching," up to noon on APRIL 25TH, 1906, for Trenching for water and sewer pipes according to plan and specification.
Approximate distance to be excavated about 5,000 lineal feet. Rock (slate) 5,000 cubic yards. Earth 14 000 cubic yards.
Also for Trenching for a sixteen inch water pipe for a distance of about 10,000 lineal feet, mostly earth.
Tenders will be received for the whole or sections of the work.
Plans and specifications can be seen at the office of the Superintendent of Water Works, Dartmouth, N. S.
Each tender must be accompanied by a certified cheque, payable to the Town Treasurer of Dartmouth, for the sum of $400. which will be subject to forfeiture in case of failure on the part of the contractor to enter into a written contract with approved sureties, if called upon to do so.
The Town of Dartmouth reserves the right to reject any or all tenders or to accept any bid which appears advantageous to the Town.

ALFRED ELLIOTT,
Town Clerk.
Dartmouth, N. S., March 29, 1906.

NOTICE TO CONTRACTORS

Tenders will be received by registered post only, addressed to the Chairman of the Board of Control, City Hall, Toronto, up to noon on TUESDAY, APRIL 17TH, 1906, for the construction and supply of seven Steel Pontoons.
Also for the construction and supply of seven Wooden Pontoons.
Envelopes containing tenders must be plainly marked on the outside as to contents.
Plans and specifications may be seen and forms of tender obtained at the office of the City Engineer, Toronto.
The usual conditions relating to tendering, as prescribed by the City By-law, must be strictly complied with.
The lowest or any tender not necessarily accepted.

E. COATSWORTH (Mayor),
Chairman Board of Control.
City Hall, Toronto, March 23rd, 1906.

CITY ENGINEER WANTED

Applications will be received by the undersigned until APRIL 17TH for the position of City Engineer of the City of Edmonton, Alberta. Salary, $3,000 per year. Applicants should fully state experience and qualifications.

GEO. J. KINNAIRD,
Secrefary-Treasurer.

TENDERS

will be received by the undersigned until noon on MONDAY, THE 16TH APRIL, for all the trades required in the erection of a new building in Bay Street for the Molson's Bank, in accordance with plans prepared by Messrs. Finley & Spence, Montreal. Tenders will be received either in bulk or for the separate trades.
The lowest or any tender not necessarily accepted.

DARLING & PEARSON,
Associated Architects,
2 Leader Lane, Toronto.

CONTRACTS OPEN.

SUSSEX, N.B.—James A. Moore, of Waterford, will build a residence here.

LOUISBURG, N.S.—Arthur Spears will erect a dwelling here this season.

BRECHIN, ONT. — Joseph Thompson will build a house here this summer.

FOLLOWMEAD, SASK.—John Hill will build a fine residence here this season.

ALTAMONT, MAN.—Bruce Hayes is preparing to build a new dwelling this spring.

HARROW, ONT.—Prideaux Fox will erect a large two-story building here this spring.

NEW LISKEARD, ONT.—A temperance hotel is being promoted here; cost $25,000.

NELLES CORNERS, ONT. — The Grand Trunk Railway will erect a new station here.

MAGOG, QUE. — Plans are being prepared for a new post office building on Pine street.

SHOAL LAKE, MAN.—D. C. Fleming intends building an addition to the Wilson Block.

WALKERVILLE, ONT. — Charles Riggs will erect a residence on Victoria road this spring.

EMERSON, MAN. — The School Board have adopted plans for a new school building.

PORT HOPE, ONT. — It is said that the Traders' Bank building is soon to be enlarged.

EAST TORONTO, ONT. — Fred Cornell is preparing to erect a house on Heyworth avenue.

WELLINGTON, ONT. — Hubert Webster will build a house on Consecon street this summer.

ESSEX, ONT.—John Rose will build two brick stores on the site of the buildings recently burned.

FRANKLIN, MAN.—E. H. Sharp has taken tenders for an addition to the school building here.

WOLSELEY, SASK.—A by-law will be submitted to borrow $20,000 for building a fire and town hall.

KURTZVILLE, ONT.—The Evangelical Association are preparing to build a new brick church here.

SNOWFLAKE, MAN.—The Methodist congregation have decided to build a new church this season.

BEAMSVILLE, ONT.—E.D. Smith, M.P., of Winona, is arranging to have a large canning factory built here.

BRACEBRIDGE, ONT.—The Standard Chemical Company propose to establish a plant here to cost $130,000.

EDMONTON, ALTA.—York & Secord purpose erecting an addition to the Windsor Hotel, to cost about $60,000.

LETHBRIDGE, ALTA.—J. A. Macdonald, architect, has taken tenders for erection of a residence for W.A. Buchanan.

WELLAND, ONT.—G. H. Pettit has plans ready for a new residence on Burgar street, two-storey, brick, cost $5,000.

ST. THOMAS, ONT.—F. M. Griffin purposes erecting a pressed brick building, corner Talbot and Railway streets.

LAURIER, MAN.—B. Kingshott will receive tenders up to April 6th for building a school house in Royal Oak district.

ARDEN, MAN. — Plans for a new hotel building have been prepared, cost $10,000. M. E. Broughton is interested.

URQUART, ALTA.—J. Y. Doak will receive tenders up to April 14th for building an addition to Sargent school house.

BANFF, ALTA.—The Pacific Coal Company, of Bankhead, are putting in a briquetting plant here, at a cost of $85,000.

AMHERST, N.S.—Dr. W. T. M. McKinnon will erect a house and office corner of Havelock and Prince Arthur streets.

SARNIA, ONT. — J. D. Stewart, Town Clerk, will receive tenders up to April 9th for glazed sewer tile, portland cement, etc.

HIGH RIVER, ALTA.—Lem Sexsmith intends building a three storey brick hotel on the present site of the Oxford hotel.

BEATRICE, ONT.—W. O. Johnston is taking tenders this week for the building of a school house for S. S. No. 4, Stephenson.

ARNPRIOR, ONT.—The Diamond Park Mineral Company will receive tenders up to April 10th for building their bottling works.

KINGSTON, ONT.—A by-law to raise $80,000 debentures for extension to city's light, heat and power plant, will be voted on in May.

BRANDON, MAN. — The Fire, Water and Light Committee are considering the installation of a new fire alarm system here.

SEBERINGVILLE, ONT. — The Evangelical Association are taking steps towards building a new parsonage. D. K. Erb is interested.

PORT PERRY, ONT.—W. Brock intends building a house, corner Ottawa and Queen streets.—John Irwin will build a residence this summer.

TRURO, N.S.—It is understood that Thomas Bates has purchased a large site on Young street on which he will erect a number of cottages.

VICTORIA, B.C.—The City Council are considering the purchase of a new portable engine, road grader, plough and scrapers to cost about $1,650.

MORRIS, MAN.—R. F. McTavish will receive tenders up to April 10th for construction and material of a pontoon bridge across the Red River here.

RED DEER, ALTA. — Complete plans with report for the sanitary drainage of the town have been submitted by John Galt, C.E. and M.E., Toronto.

BOWMANVILLE, ONT.—The Toronto & York Railway Company are seeking legislation to extend their railway to Stouffville, Whitby and this town.

LACOMBE, ALTA.—A. T. Inskip intends building a brick block on Allan street.—Morrison & Johnstone are preparing to build a brick store this summer.

WOODSTOCK, ONT.—Two bridges are to be built between North Norwich and Windham, one on the border of the county and the other on the twelfth line.

GALT, ONT. — The Galt Malleable Iron Works have secured the Malt House property on Kerr street for part of their plant. Other buildings will be added later.

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OBSTRUCTION OF TRAFFIC
MONEY

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Light Rails
Dump Cars

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W.H.C. MUSSEN & CO.

Railway, Mining and Contractors' Supplies

MONTREAL

PORT HANEY, B. C.—The Burrard Flume Company intend locating large power works near this town and purpose bringing water from Lillooet lake in a flume.

WOODSTOCK, N.B.—J. C. Hartley will receive tenders up to April 6th for furnishing 650 lineal feet of granite curbing. Specifications at office of A. Henderson.

BELLEVILLE, ONT. — The Belleville Portland Cement Company will receive tenders up to April 10th for erection of a number of workmen's houses at Point Anne.

ST. EUSTACHE, QUE. — The Great Northern Railway Company are surveying for a new line from this town to connect with the railway running out from Carillon.

MORRISBURG, ONT.—Simpson & Lewis, Ottawa, have been engaged as consulting engineers for the town for the building of a power plant for the Canada Tin Plate Company.

SPRINGHILL, N.S. — John Murray is erecting a large block in which the Bank of Nova Scotia will have offices.—D. Rogers intends erecting a store building and four houses.

STAFFORD, ONT. — Tenders will be received by R. Orr, Rector, Micksburg, up to April 14th, for the erection of St. Stephen's church. Plans at Walter Beatty's factory, Pembroke.

WEYBURN, SASK.—Hutchison & Nobles, architects, Regina, will receive tenders up to April 17th for constructing a church here. Plans with architects and at office of Black & Hilliar.

LIME LAKE, ONT.—A. C. McConnell will receive tenders up to April 16th for erection of a Methodist church here. Plans with Rev. C. W. DeMille, Roblin, and with N. McCutcheon, Marlbank.

UXBRIDGE, ONT. — A report on the remodelling and construction of the waterworks system for both fire and domestic service has been received from John Galt, consulting engineer, Toronto.

ALEXANDRIA, ONT.—F. Gelinas, Secretary Department of Public Works, Ottawa, will receive tenders up to April 6th for the erection of a post office building. Plans with above named and with Postmaster here.

SPRUCE GROVE, ALTA.—C. Weidenhammer will receive tenders up to April 20th for erection of a Lutheran church here. Plans with H. A. Magoon, architect, Edmonton, Rev. J. Goos and the above named.

INDIAN HEAD, SASK. — A. M. Fraser & Company have plans prepared for several houses.—Tenders are being asked up to April 17th for construction of waterworks system here. John Galt, Toronto, consulting engineer.

MALAGASH, N. S.—Fred. Gelinas, Department of Public Works, Ottawa, will receive tenders up to April 21st for building a wharf here. Plans at his office, at the post office here, and with C. E. W. Dodwell, Halifax, N. S.

PERTH, ONT.—A by-law to buy a site for the Carnegie library has been passed. The Library Board of the Town will shortly call for plans from architects for the building, the cost of same not to exceed $10,000. Particulars later.

WOLFVILLE, N. S.—W. F. Woodworth will build a fine residence on Linden avenue.—Mrs. Hutchinson will build a house on Prospect street.—C. H. Borden is making plans for an addition to his store.—G. A. Crozier contemplates erecting a fine building.

HUMBER BAY, ONT.—The Budde Brickmaking Company have purchased land on the West hore Sroad on which they will erect a plant at a cost of about $40,000.—Henry Buckwell will establish a brickmaking plant on the Lake Shore road west of the Humber.

TORONTO JUNCTION, ONT.—The following building permits have been granted : D. Kaiser, brick dwelling, Lakeview avenue, cost $3,000 ; J. M. Alderson, residence, Lakeview avenue, cost $1,500 ; W. Trombly, brick house, Dundas street, cost $3,500.

SYDNEY MINES, N.S.—The Town Council have decided on additions to school buildings to cost $5,000, a new town hall to cost $10,000 and street improvements and sidewalk extensions to cost $15,000. — Joseph Woods will build a residence near Beach Hill.

PARKER'S COVE, N. S.—Tenders will be received by Fred Gelinas, Department of Public Works, Ottawa, Ont., up to April 21st for breakwater extension here. Plans at his office, also at office of C. E. W. Dodwell, Resident Engineer, Halifax, N. S., and the post office here.

EBURNE, B.C.—The British Columbia Market Company, of Vancouver and Victoria, have purchased land here on which they will construct an abattoir to cost $25,000.—W. H. Higgins has sold a lot to a syndicate of Michigan capitalists on which a large saw mill will be erected.

BARRIE, ONT.—Fred Marr will receive tenders up to April 6th for the erection of a new school house in Allandale and for system of heating, ventilation and plumbing. Plans at office of above, Ross Block, Dunlop street, and with R. J. Edwards, architect, 18 Toronto street, Toronto.

KENORA, ONT.—G. M. Roich has had plans prepared for a two-storey brick building on Main street.—The town is considering the addition of another storey to the Municipal offices for a Council chamber.—The proposed Railroad Y. M. C. A. building, corner Matheson and Railroad streets, will be brick and stone and cost about $20,000.

PETERBORO', ONT. — F. Adams, Chairman Fire, Water and Light Committee, will receive tenders up to April 9th for erection of new fire hall building.—W. C. P. Heathcote, C. E., is preparing plans for the new factory of the Brinton Carpet Company. It will be one storey, concrete, with steel roof. Tenders will soon be called for.

REGINA, SASK.—It is stated that the C. P. R. intends erecting a hotel here this season.—The Traders Bank have secured an option on a site, corner Scarth and South Railway streets, for a new bank building.—There is a proposition before the City Council for the building of a union station here for the C. P. R., G. T. P. R., G. N. R. and C. N. R.

SOURIS, MAN.—J. W. Breakey will receive tenders up to May 19th for the following : Construction of concrete culvert through creek, one mile east of this town ; construction of two steel spans 90 feet each on concrete abutments and for a steel bridge across the Souris river at Monteith Junction. Specifications at office of above named and at Public Works Department, Parliament Buildings, Winnipeg.

LONDON, ONT. — The Bank of Hamilton is said to be negotiating for a site corner of Richmond and King streets for a bank building. The Traders' Bank is also looking for a site.—The following building permits have been issued: R. G. Wilson, brick house, corner St. James and Richmond streets; J. M. Hickey, residence on Central ave.; B. N. Campbell, two-storey brick residence on St. James street.

FORT WILLIAM, ONT. — P. J. Pilkey will build a two-story block on Victoria avenue.—It is said that the Canadian Northern Railway will erect large office buildings at the approach of the freight shed dock.—The Presbyterian congregation have decided to enlarge their church at a cost of $10,000.—S. C. Young will receive tenders up to April 17th for the erection of a High school building here. Plans at office of H. R. Halton, architect.

HAMILTON, ONT.—The Hamilton, Galt & Guelph Railway are seeking incorporation to construct an electric railway from Hamilton to Elmira.—The following building permits have been issued: C. H. Roper, brick house, Emerald street, cost $1,200; George E. Mills, two brick houses, Grant avenue, cost $2,500; Charles Makison, brick house, Wentworth street, cost $1,600; D. Kelly, two brick houses, corner Tisdale and Wilson streets, $1,600 each.

QUEBEC, QUE.—Ouellet & Levesque, architects, are preparing plans and specifications for a Roman Catholic church at Ancienne Lorette to cost approximately $80,000. Tenders will be invited next June.—Fred Gelinas, Department of Public Works, Ottawa, will receive tenders up to Arril 23rd for extension to hospital wharf at Grosse Isle. Plans at his office and at offices of C. Desjardins, Post Office building, Montreal, and A. R. Decary, 5 Du Fort street, this city.—J. Gallagher will receive tenders up to April 17th for iron and brass castings, forge work, lead pipe and pig lead, cement, brick and drain pipes.—Aug. Malouin will receive tenders up to April 10th for supply of 2,000 feet of fire hose.

OTTAWA, ONT. — Some Ottawa capitalists have secured an option on a site, corner Wellington and Lyon streets, for a large apartment house to cost $60,000.—The Grand Trunk Railway have had plans prepared for the erection of a central station and hotel east of the canal, near Little Sussex street, to cost over $1,000,000.—The Building Committee of the Public School Board have approved of Superintendent Garvock's plans for a four-roomed brick addition to Creighton street school. — The Transcontinental Railway Commission will soon call for tenders for ties and rails for the lines between Winnipeg and Lake Superior Junction and between Quebec and the headwaters of the St. Maurice river.—J. P. MacLaren, architect, will receive tenders up to April 17th for the erection of Stewarton Presbyterian church.

NEW WESTMINSTER, B.C.—Plans have been prepared and tenders will soon be invited for the erection of William Power's three-storey frame hotel on Columbia street east, cost about $5,000.—J. Henry, Marysville, Wash., is looking for a site here for a saw mill.—The British Columbia Distillery Company have plans prepared for additions to their works. These will include three-storey brick shipping and bottling warehouse, two-storey brick cooperage and six large stock buildings; cost $60,000. — The Schaake Machine Company are considering plans for the erection of a two-storey show-room, 30 x 60 feet.—It is expected that the Council will have the old Carnarvon street bridge soon replaced by a steel structure to cost about $5,000.—C. Dore and F. Allan, Vancouver, have been looking for a site here for the establishment of a cement block factory.—The Board of Managers of the Royal Columbian Hospital are preparing for the erection of a new hospital here to cost about $40,000.—Grant & Henderson, architects, are taking tenders this week for erection of a brick block, corner Columbia and Sixth streets.

VANCOUVER, B.C.—Grant & Henderson, architects, will soon call for tenders for erection of a block on Cordova

street for Evans, Coleman & Evans, three stories, 80 × 106 feet, front white pressed brick with cut stone trimmings. Same architects will shortly call for tenders for erection of a five-story brick and stone block, 52 × 120 feet, white pressed brick front, with cut stone trimmings, corner Cordova and Seymour streets, for Clark & Stuart, cost $65,000.—Parr & Fee, architects, are preparing plans for an addition to the Empress block for Julius A. Brown, of Los Angeles, Cal., cost about $10,000.—The B.C. General Contract Company have eight miles of grading of Kootenay Central Railway to let to contractors.—Plans have been prepared and tenders will be called for shortly for St. John's church building. It will be stone, 104 × 70 feet, with tower 96 feet high, hot air and hot water heating and modern ventilation.—C. W. Murray has taken tenders for erection of a four-roomed school building at Fairview West and a four-roomed school building at Cedar Cove.—Dalton & Eveleigh, architects, have taken tenders for alterations to the Quinte Hotel, Cordova street, for the Vancouver Brewery Company.—Emil Guenther, architect, has prepared plans for a fireproof hotel to replace the Balmoral, corner Cordova and Carrall streets, three stories, 50 × 132 feet, cost $35,000. Tenders received up to April 4th.

MONTREAL, QUE.—Supintendent Janin has recommended the following works: Laying of service pipes, cost $59,300; to complete the circuit of the 24 inch water main, $14,000; to extend the 12 inch high level water main from Peel to Sherbrooke streets and along St. Catharine and Bleury, $17,000; to cement the bottom of east side of McTavish reservoir, $30,000; new distribution main at low level pumping station, $35,000.—Building permits have been granted to Mrs. P. P. Martin for a three-storey stone building, corner St. Denis and Lagauchetiere streets to cost $18,000, and to W. H. Biggar for a residence on Pine ave., to cost $12,000.—Everete & Houghton have secured a permit to erect a three-storey stone building at 1012 Bleury street, to cost about $6,200.—City Surveyor Barlow has recommended the following appropriations for street improvements: Permanent sidewalks, $185,776; repairs to pavements between car tracks, $41,500; permanent pavements, $1,173,000. — The Montreal Terminal Cartage Company have applied for permit to erect a building, corner of King and Wellington streets, to cost $137,000.—A new station will be erected at corner Mount Royal ave. and St. Urbain streets in connection with the new railway line running from St. Eustache.

WINNIPEG, MAN.—Tenders have been taken by Darling & Pearson, architects, for the erection of a See House for the Archbishop of Rupert's Land. Same architects are taking tenders this week for erection of an apartment building corner Ellice ave. and Edmonton street. — The Western Bag Company have taken out a permit to build a factory on Pacific ave., cost $35,000.—The City will soon call for tenders for the erection of a gas plant and laying mains.—The Y. M. C. A. have had plans prepared for a new building on Ellice ave., five stories, brick. —V. W. Horwood, architect, will receive tenders up to April 5th for erection of a frame and stone residence, with hot water heating, on River ave., for L. Verhoven. —The Fire, Water & Light Committee may call for new tenders for a gas producer plant.—E. C. White, consulting engineer, will receive tenders up to April 7th for the installation of a steam heating plant in the block to be erected on Donald street for A. H. Pulford.—The Northwest Commercial Travellers' Association intend erecting a block corner Bannatyne ave. and King street.—J. H. G. Russell, architect, is taking tenders this week for erection of a residence on Wellington crescent for W. B. Stirling.—The Chairman of the Committee on Works will re-

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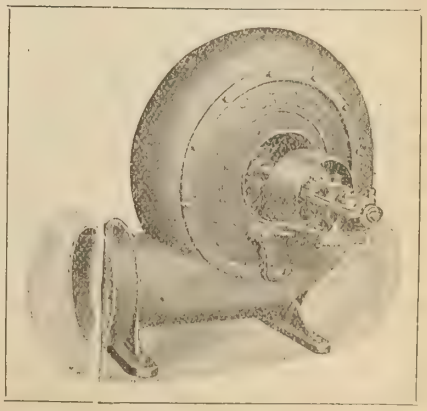

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ceive tenders up to April 10th for supply of from 30,000 to 50,000 barrels of cement. Specifications with Col. H. N. Ruttan, City Engineer.—Plans are being prepared for building a parish club for the church of the Immaculate Conception.—Tenders will be received by the Chairman of Committee on Works up to April 24th for 500 enamel street name plates.—C. P. R. engineers under direction of F. W. Young are surveying a line from Bantry to a point due north to connect with the Lacombe branch.

TORONTO, ONT.—F. S. Baker, architect, will soon call for tenders for the erection of a house on Brunswick avenue and one on Roxborough street. He is preparing plans for a large apartment house on Yonge street.—R. J. Edwards, architect, has prepared plans for a twelve-roomed brick and stone school building at Barrie, Ont., to cost about $18,000, for which tenders will be received by F. Marr, Barrie, up to April 6th.—A. G. Strathy & Co., real estate dealers, are having plans prepared for several stores on Bloor street near Brunswick avenue. They expect to erect store and dwellings on Queen street near McCaul.—F. J. Smith & Co., real estate agents, have sold a site on Russell Hill drive to G. G. Burnett for a residence, also a site on Liszt avenue to Mr. Draper, one on Huron street to Mr. Elliott, and one on Poplar Plains road to E. Cote, on which dwellings will be built.—C. H. Fuller, Secretary of the Continental Life, states that the company intend making alterations in the Medical building, corner Bay and Richmond streets.—The Dominion Government will erect a ten storey receiving warehouse on Front street, west of the customs house.—G. W. Gounilock, architect, has the plans for the new press bureau at the Exhibition grounds ready to be submitted to the Board. Same architect is preparing plans for a two storey addition to the Bank of Hamilton building, corner of Queen street and Spadina avenue.—Tenders will be received by Darling & Pearson, associated architects, for the erection of a new building on Bay street for the Molson's Bank. Finley & Spence, architects, Montreal.—The Globe Printing Company have purchased the property at 8 to 16 Queen street east on which they will erect a large printing and publishing house at an early date.—The new building for the National Club will be begun in the near future.—The Board of Governors of the Western Hospital purpose erecting two large public wards in connection with their present building.—Harmsworth Bros., English publishers, are seeking a site here on which to establish a plant to cost $80,000.—Pearson Bros., real estate dealers, have sold a site on Nanton crescent to G. A. Chapman for a brick residence to cost about $8,000.—Building permits have been issued as follows: R. Paul, pair 2-storey roughcast dwellings, brick fronts, Belford road, near Smith street, cost $3,000; J. Riordan, pair 2-storey roughcast dwellings, brick fronts, Dora street, near St. Helens avenue, cost $3,000; R. T. Bouels, 2-storey and attic stone and brick dwelling, corner Huron street and Bernard avenue, cost $4,000; Dr. T. L. Walker, 2-storey brick and cut stone dwelling, corner Dale and Maple avenues, cost $7,000; A. E. Booth, 2½-storey stone and brick dwellings, Summerhill avenue, near Yonge street, cost $2,700; John Russell, four 2-storey brick dwellings, Gerrard street, near De Grassi, cost $8,500; Mrs. C. M. Rice, pair 2½-storey brick and stone dwellings, on Macpherson avenue, near Poplar Plains road, cost $4,600: B. H. Morehouse, 2-storey and attic stone and brick dwelling, Binscarth road, near Glen road, cost $4,500; B. H. Moorehouse, pair 2-storey brick and roughcast dwellings,

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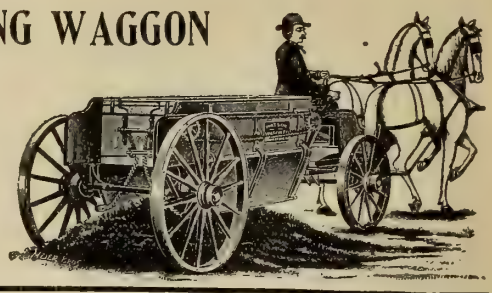

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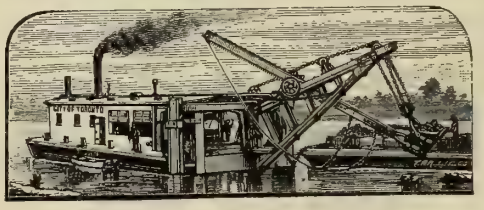

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Allen avenue, near Bolton, cost $3,000; George Phillips, pair 2-storey brick dwellings, Bathurst street, near Bloor, cost $5,000; George Tyndall, 2 storey brick detached dwelling, Curzon street, near Queen, cost $2,800; T. H. Watson, 2-storey and attic brick dwelling, 122 Tyndall avenue, cost $10,000; G. A. Harper, 2-story and attic brick dwelling, 155 Rusholme road, cost $4,500; Miss Agnes Mather, 2-story and attic stone and brick dwelling, Markham street, near Lennox, cost $3,800; J. A. Aberdeen, two pair 2½-story brick and stone dwellings, Starr street, near Empress crescent, cost $9,600; G. G. Dermitt, pair 2-story brick and stone dwellings, Carlton street, near Parliament, cost $5,500; H. R. Reynolds, 2-story brick store and dwelling, 436 College street, cost $2,000, C. S. MacInnis, 1-story brick garage and stable, rear No. 1 Admiral road, cost $1,800; F. S. Sneath, 2½-story brick store and dwelling, corner Manning and Barton avenues, cost $3,500; Mr. Singer, 2-story brick store, Queen street, near Broadview avenue, cost $3,500; The Private Garage, 1-story brick garage and stable, Robert street, near College, cost $4,000; Thos. E. Lewis, 3-story brick and stone warehouse, rear of 37-47 Richmond street east, cost $12,000; Thomas Hunter, 2½-story brick dwelling, Crescent road, cost $6,000; Kay Bros., 2½-story brick dwelling, Withrow avenue, near Broadview, cost $2,800; Kay Bros., 2½-story stone and brick dwelling, Palmerston Boulevard, near College street, cost $4,500; W. N. McEachern, pair 2-story frame dwellings, Lee avenue, near Violet, cost $3,000.

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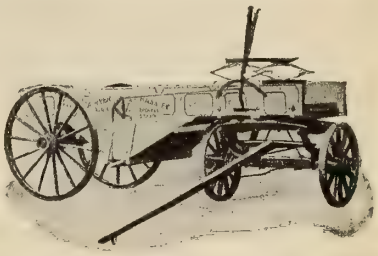

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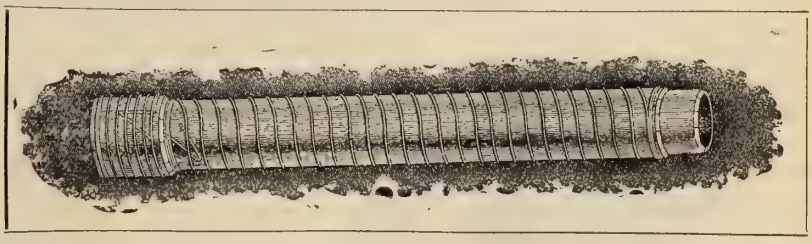

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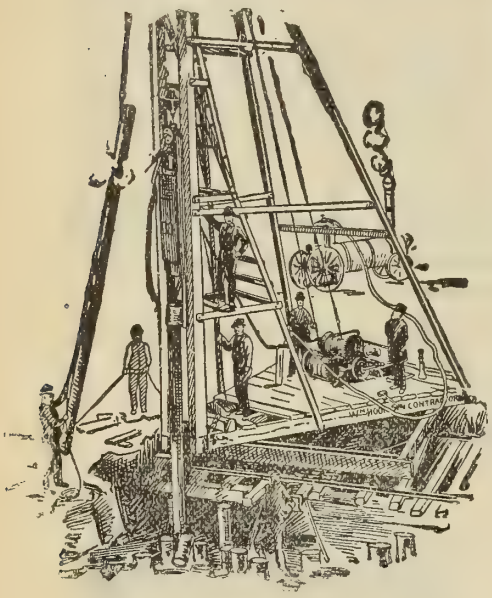

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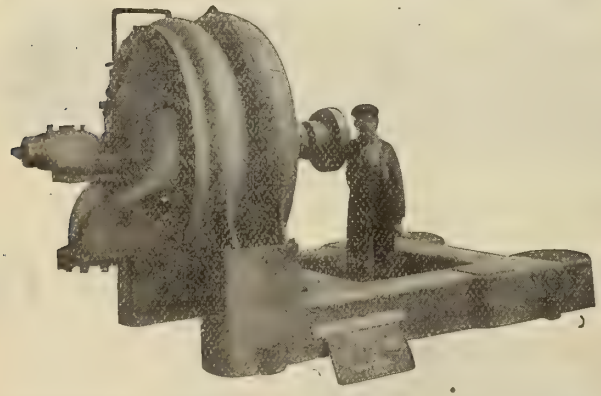

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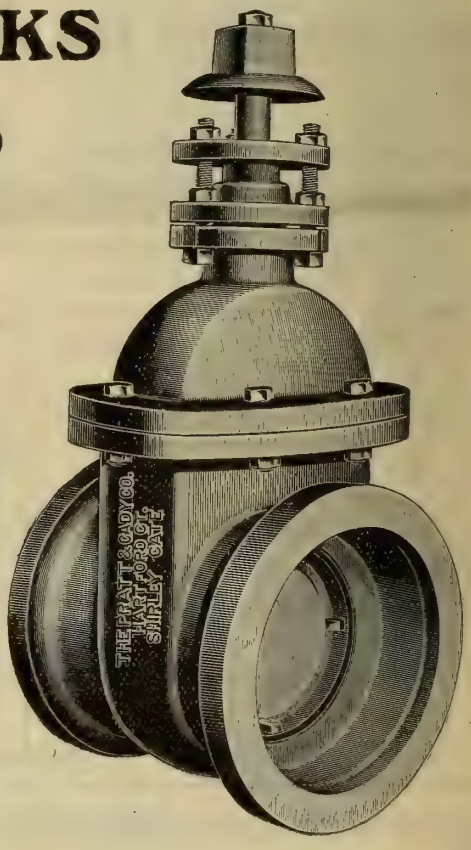

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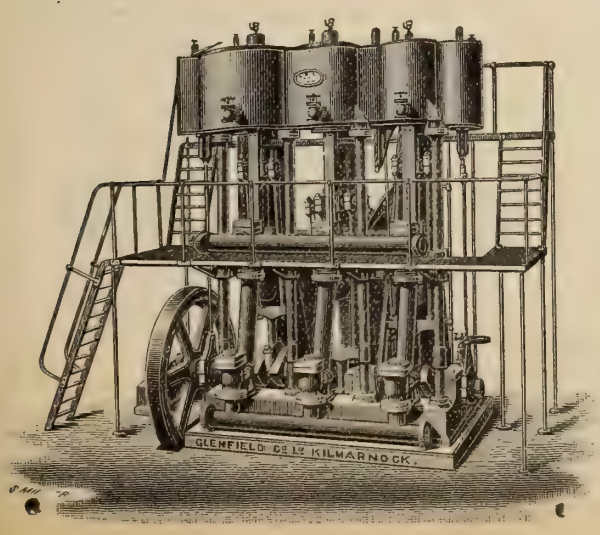

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CORRECTION.

The Dominion Concrete Company, Kemptville, Ont., have called our attention to an error in their advertisement as it appeared last week. "We also make 2 in. x 2 in. egg-shape sewer pipe" should have read "We also make 2 feet x 3 feet oval or egg-shape sewer pipe".

The water pipe crossing the Bow river and the inverted syphon for the drainage system at Banff, Alberta, have been completed. This work is being carried out by the Dominion Government, under the supervision of Mr. John Galt, C.E. & M. E., Toronto.

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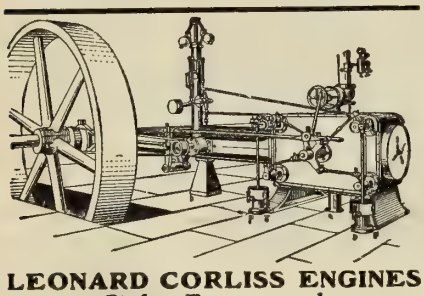

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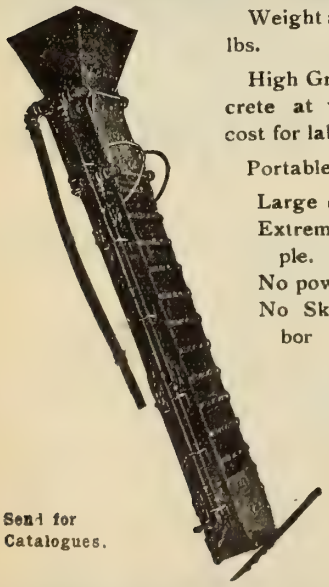

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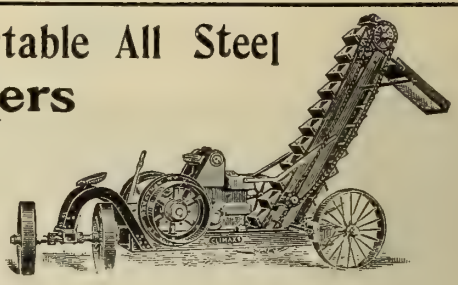

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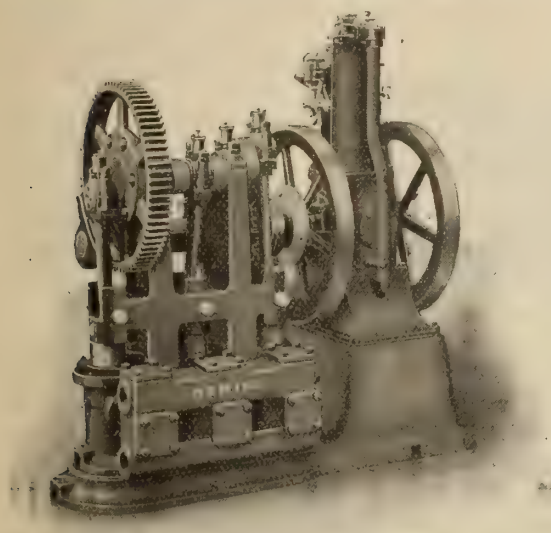

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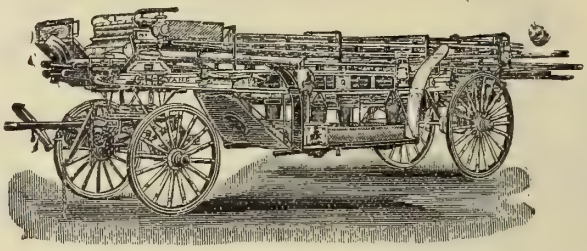

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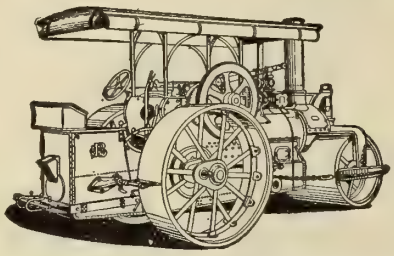

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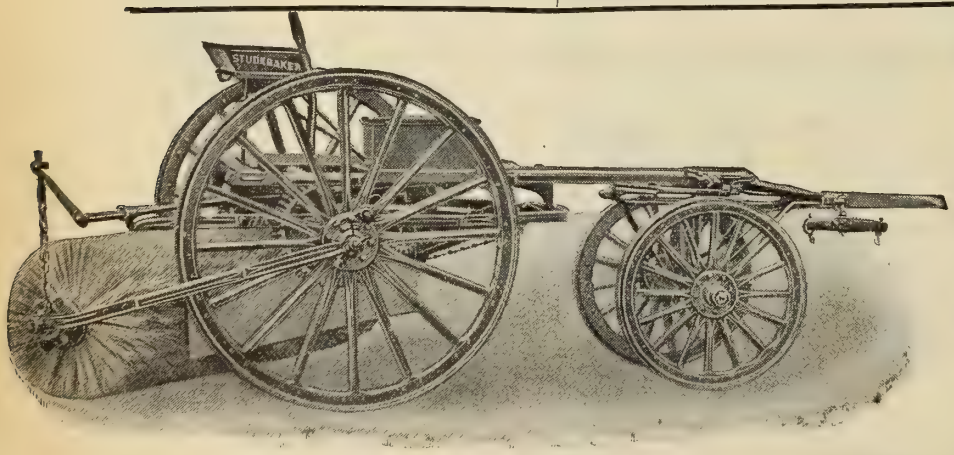

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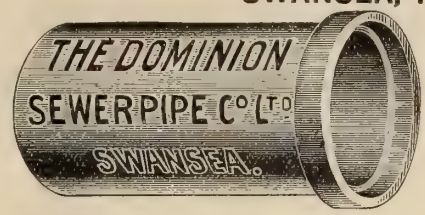

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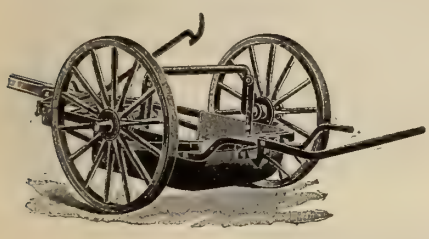

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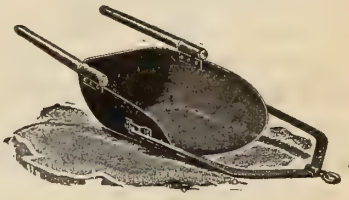

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					Initial	Final	1 dy.	7 dys.	28 dys.	3 mos	1 yr.	1 dy.	7 dys.	28 dys.	3 mos.	1 yr.
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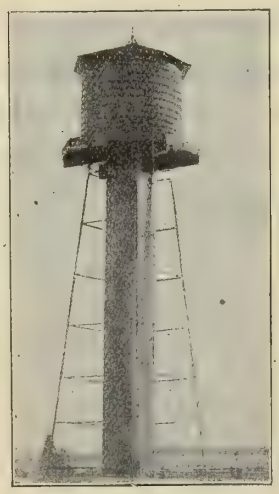

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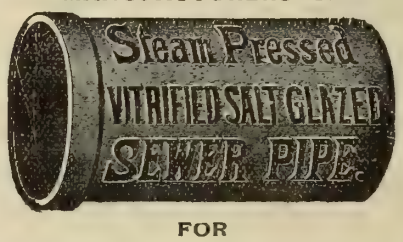

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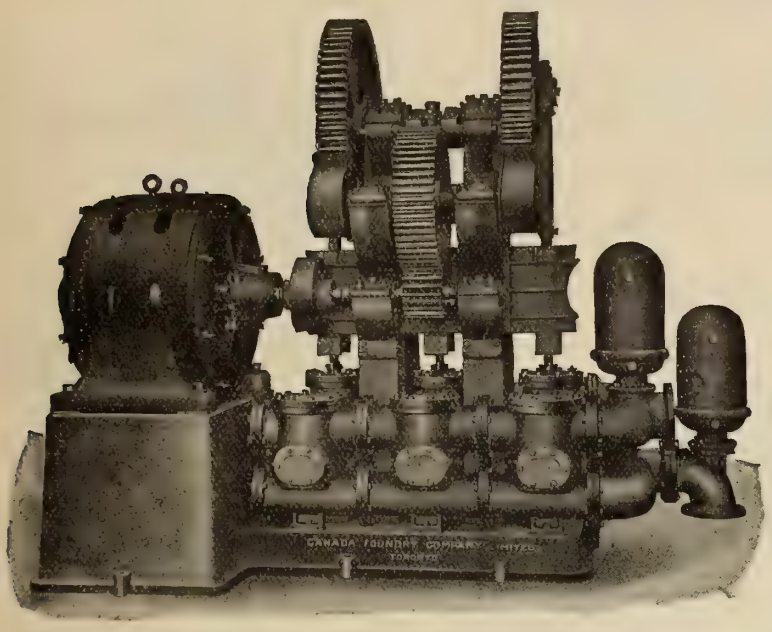

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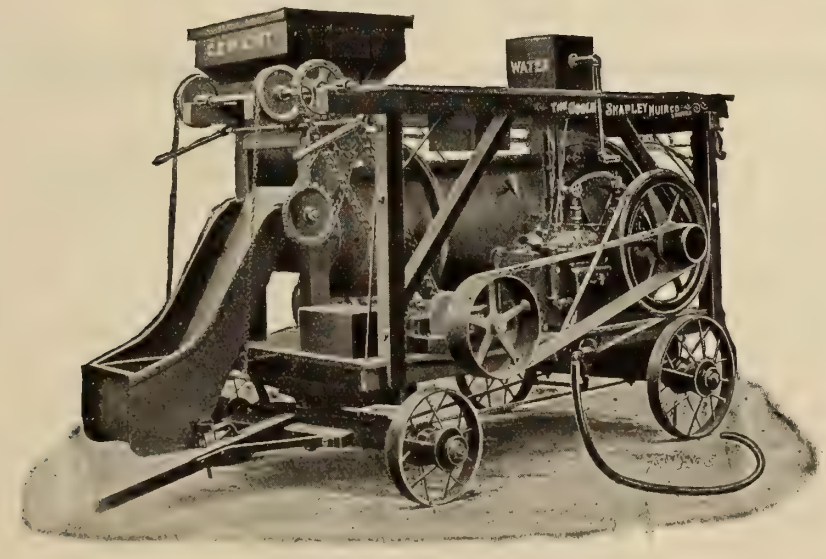

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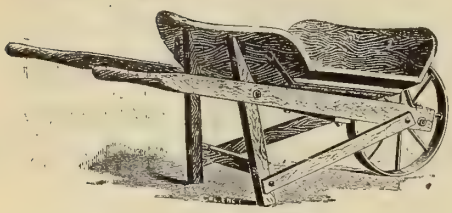

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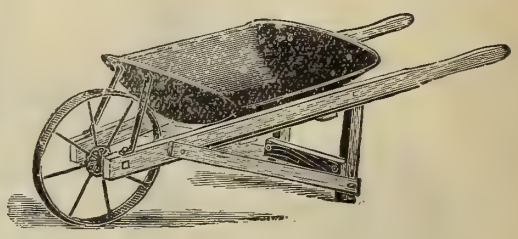

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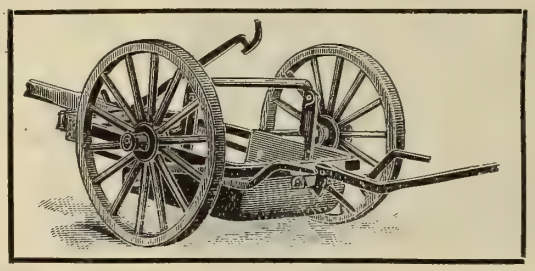
Scrapers are constructed from the highest grade material.



DRAG SCRAPERS

Our line of Drag Scrapers is most complete. We carry three styles in stock in all capacities.

Extremely low prices.

Immediate shipment.

Plows, Concrete Mixers, Hoisting Engines, Derricks, Etc.

CONTRACTORS' SUPPLIES

of all kinds

THE WELLS LIGHT

800, 2,500, 5,000 Candle Power

from Kerosene Oil

Used by all large Contractors, Mines, Railways, Engineers.

This is a portable, self contained light, inexpensive to operate, very satisfactory and is not affected by weather.

THE WELLS LIGHT

The "Little Wonder" Size

We have had this little light specially designed to meet the present demands.

500 Candle Power

We guarantee this light to be perfect in action and when you wish to

Turn Night into Day

you can not do better than to install a Wells Light.

LET US SEND YOU OUR SUPPLY CATALOGUE

F·H·Hopkins & Co.

Successors to the Late James Cooper

MONTREAL

Dunn Bros. & Company, Winnipeg Agents

CANADIAN

Contract Record

A Weekly Journal of Public Works, Tenders, Advance Information and Municipal Progress

This Paper Reaches Every Week the Town and City Clerks, Town and City Engineers, County Clerks and County Engineers, Purchasers of Municipal Debentures and Leading Contractors in All Lines Throughout Canada

VOL. 17. TORONTO, MONTREAL — APRIL 11, 1906 — WINNIPEG, VANCOUVER No. 6

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THE NASH ROAD,
Borough of Brooklyn, New York City.

TOWN OF INDIAN HEAD
PROVINCE OF SASKATCHEWAN

TENDERS FOR

WATER WORKS AND SEWERAGE

Contract "A"—All labor necessary for constructing the water works, supply main and distribution system and certain materials therefor.
Contract "B"—All labor for constructing sewerage system and certain materials therefor.
Contract "C"—All labor and materials for constructing a reservoir and dam at the Squirrel Hills.
Contract "D"—Supplying wood pipe and special castings and valves for wood pipe.
Contract "E"—Supplying cast iron pipes and special castings.
Contract "F"—Supplying fire hydrants and gate valves.
Contract "G"—Supplying vitrified tile pipes.
Contract "H"—Supplying cast iron manhole covers, catch basin covers, etc.
Contract "I"—Supplying Underwriter fire pump.

Sealed tenders will be received by the Secretary-Treasurer until 8 p. m. on TUESDAY, APRIL 17TH, 1906.

Plans and specifications may be seen and forms of tender obtained at the office of the Secretary-Treasurer, or at the head office of the Chief Engineer.

F. L. MACKAY, ESQ., Mayor.
C. J. GODFREY, ESQ., Secretary-Treasurer.
JOHN GALT, C.E. & M.E., Chief Engineer,
Toronto, Ontario.

TENDERS FOR

NEW THEATRE

Sealed tenders will be received by the undersigned up to 6 o'clock p. m. of SATURDAY, APRIL 14TH, 1906, for the various trades required in the erection of a new Theatre Building, Hamilton, Ont.

Lowest or any tender not necessarily accepted.

STEWART & WITTON, Architects,
Hamilton, Ont.

Tenders for Bridge

Sealed tenders, addressed "S. R. Armstrong, City Clerk, Peterborough, Ont., and endorsed "Tenders for Bridge," will be received up to 4 p.m.

Saturday, April 14th, 1906,

for the construction and completion of a Concrete and Steel Bridge of 30 feet clear span over the creek on Charlotte Street, Peterborough

Parties may tender separately or combined for
(a) Concrete Abutments, Sidewalks and Reinforced Concrete Deck.
(b) Steel Floor System
in accordance with plans and specification which may be seen at the office of the undersigned on and after April 2nd.

Tenders must be accompanied by a marked cheque equal to 5 per cent. of estimated bulk sum of (a) Concrete Work, and for the sum of $75.00 for (b) Steel Work.

The lowest or any tender not necessarily accepted.

T. A. S. HAY,
City Engineer.

TENDERS FOR

House of Refuge

Sealed tenders for House of Refuge, on site near Belleville, in County of Hastings, will be received by the undersigned up to noon of the 17TH DAY OF APRIL, 1906, for whole building or for each kind of work, according to plans and specifications, namely:—

1. Bulk tender for whole building.
2. Mason, Brick and Plaster work.
3. Heating, Plumbing and Metal work.
4. Carpenter and Joiner work.
5. Painting and Glazing work.

Plans and specifications may be seen at the office of the County Clerk, Belleville; or at the office of G. M. Miller & Company, Architects, Toronto.

Approved security for the satisfactory completion of whole building by 1st August, 1907, will be required of contractor.

If separate contracts for the different kinds of work are made each kind of work must be done in time for the whole building to be finished as aforesaid.

The lowest or any tender not necessarily accepted.

WM. R. AYLESWORTH,
County Clerk,
Belleville.

Shire Hall, March 15th, 1906.

Municipal Debentures
FOR SALE

The Town of New Liskeard is constructing a Water Works System and issuing Debentures therefor.
For particulars write
H. HARTMAN,
Clerk.

NOTICE TO CONTRACTORS

Tenders will be received, addressed to the undersigned and marked "Tender for Trenching," up to noon on APRIL 25TH, 1906, for Trenching for water and sewer pipes according to plan and specification.

Approximate distance to be excavated about 5,000 lineal feet. Rock (slate) 5,000 cubic yards. Earth 1 400 cubic yards.

Also for Trenching for a sixteen inch water pipe for a distance of about 10,000 lineal feet, mostly earth.

Tenders will be received for the whole or sections of the work.

Plans and specifications can be seen at the office of the Superintendent of Water Works, Dartmouth, N. S.

Each tender must be accompanied by a certified cheque, payable to the Town Treasurer of Dartmouth, for the sum of $400. which will be subject to forfeiture in case of failure on the part of the contractor to enter into a written contract with approved sureties, if called upon to do so.

The Town of Dartmouth reserves the right to reject any or all tenders or to accept any bid which appears advantageous to the Town.

ALFRED ELLIOTT,
Town Clerk.
Dartmouth, N. S., March 29, 1906.

TENDERS WANTED

WATER POWER DEVELOPMENT

for the Town of Kenora, Ont., on the Eastern Outlet from the Lake of the Woods to the Winnipeg River.

Sealed proposals will be received up to APRIL 16TH, 1906, for the works in connection with the construction of a water power development, and will include all works of coffer damming, unwatering the site, also rock and earth excavation, concrete masonry, steel work, carpenter work, etc., in short, all works required in connection with the construction of a power house building, flumes, wheel pits, tail races, etc.

Approximate quantity of rock excavation, 4,300 cubic yards.

Approximate quantity of concrete work, 5,566 cubic yards.

Approximate quantity of steel work, 122 tons.

Plans and specifications may be seen at the offices of the Town of Kenora, Ont., or at the offices of T. Pringle & Son, engineers, Coristine Building, Montreal.

All tenders must be made out in accordance with general conditions specified and on special form of tender, which may be obtained at either of the above addresses. The Town of Kenora reserves the right to reject any or all bids if deemed necessary Bidders will be required to submit with their proposal a certified check for $10,000.00 on a Canadian bank, payable to the order of the Town of Kenora. Tenders may be sent in to either of the above addresses.

T. PRINGLE & SON, Engineers, Montreal.
D. H. CURRIE, Town Clerk, Kenora.

[FOR ADDITIONAL ADVERTISEMENTS FOR TENDERS SEE NEXT PAGE.]

Tenders for Cement

Tenders will be received by Richard Mitchell, City Clerk, Guelph, up till noon on WEDNESDAY, APRIL 18TH, 1906, for the supply of the Portla nd Cement required by the corporation for this season. The cement to be delivered in car lotslas required.

The owest or any tender not necessarily accepted.

J. HUTCHEON,
City Engineer.

Guelph, April 6th, 1906.

TOWN OF PERTH

TENDERS

Sealed tenders will be received until six (6) p. m., MONDAY, APRIL 30, 1906, for the furnish- of all materials and labor, for the construction of all concrete sidewalks and crossings in the Town of Perth, that the Municipal Council of the Town of Perth may desire to construct during 1906.

Tenders to be addressed to John A. Kerr, Town Clerk, Town of Perth, Ont.

An accepted cheque for $200.00 must accompany each tender.

The lowest or any tender not necessarily accepted.

For forms of tender, specifications and all other information apply to

HARRY WELCH, Town Engineer,
Box 255, Perth, Ont.

TEMISKAMING and NORTHERN ONTARIO RAILWAY

TENDERS FOR GRADING

Sealed tenders, addressed to the undersigned, will be received until 12 o'clock noon on TUESDAY, APRIL 24TH, 1906, for all the work, excepting the ballasting and track laying, connected with the building of an extension from the present existing tracks at North Bay Junction to Nipissing Junction, a distance of about three miles.

And also for an extension from North Bay Junction to Regina street, in the Town of North Bay. Plans and specifications will be on exhibition at the office of the Commission, 25 Toronto street, Toronto, and at the office of the Chief Engineer, North Bay, Ont.

Tenders must be made on printed form which will be provided by the Commission.

The Commission will not be bound to accept the lowest or any tender.

H. W. PEARSON, Secretary-Treasurer,
25 Toronto Street, Toronto.

Papers inserting this advertisement without authority will not be paid for same.

BUILDERS AND CONTRACTORS

Tenders for New Press Bureau

Separate or bulk tenders, addressed to the undersigned, will be received through registered post only, up to noon on

TUESDAY, APRIL 17, 1906,

for the various works required in the erection and completion of a Press Bureau on the Toronto Exhibition Grounds.

Plans and specifications may now be seen, and all information, together with forms of tender, obtained at the office of Mr. George W. Gouinlock, Architect, Temple Building, Toronto.

Tenders must be accompanied by a marked cheque, payable to the order of the City Treasurer, or a cash deposit, equal to 5 per cent. on tenders up to $1,000, and 2½ per cent. on tenders over that amount.

Should any party whose tender is accepted fail to execute the necessary contract and bond and give satisfactory security for the due fulfilment of the contract the deposit accompanying the tender will be forfeited to the city.

The lowest or any tender not necessary accepted. The deposits of unsuccessful tenderers will be returned.

E. COATSWORTH, (Mayor),
Chairman Board of Control.

City Hall, Toronto, April 4th, 1906.

Cement Brick business for sale; everything complete. Machine imported from Germany; stock on hand. Apply BOX 101, CONTRACT RECORD, Toronto.

FOR SALE

Twenty-five horse power Steam Boiler on wheels, in good order, only used eight months. Price Three Hundred and Fifty Dollars. Apply

C. H. CLARKE,
Gananoque, Ont.

Clerk of Works

A competent Clerk of the Works required for important job, commencing April 16th. Apply personally to

F. S. BAKER, Architect,
Mail Building, Toronto.

To Paving Contractors

Sealed tenders, addressed to the Chairman of the Committee on Works, will be received by the City Clerk, St. Catharines, Ont., until 12 o'clock noon, on MONDAY, 30TH INST., for about 16,000 square yards of paving with vitrified brick upon concrete foundation and about 2,500 lineal feet of 5" stone curbing on St. Paul Street, in the said city.

Plans and specifications may be seen and form of tender obtained at the office of the City Engineer on and after the 20th inst.

The lowest or any tender not necessarily accepted.

R. E. SPEAKMAN,
City Engineer,
April 10, 1906. St. Catharines, Ont.

CONTRACTS OPEN.

OSHAWA, ONT.—Offers have been received for a site for public library building.

CAMPBELLTON, N.B.—New Brunswick capitalists are preparing to erect a hotel here.

CHATHAM, N. B.—The Miramichi Lumber Co.. will build a new mill here, cost $50,000.

HANOVER, ONT.— A by-law has been carried to establish a Carnegie library here.

SWANSEA, ONT.— Dr. Spalding will erect a brick house on Ellis avenue, cost $3,000.

BURLINGTON, ONT. — A by-law has been carried to purchase a site for a public library.

CAYUGA, ONT. — The Imperial Plaster Company will erect a large grinding mill here.

HAILEYBURY, ONT.—It is reported that a large smelter is to be erected here, cost $75,000.

NORTH TORONTO, ONT.—The Misses Nichols will build a residence on Rohampton avenue.

TILBURY, ONT.—A by-law granting $5,000 bonus to a canning factory has been carried here.

MITCHELL, ONT. — Dr. Hurlburt will remodel his present residence and also ereet a new one.

CAMROSE, ALTA. — It has been decided to build a new school for district No. 13, [illegible] $5,000.

COLLINGWOOD, ONT. — Wilson Bros. will build a saw mill and an addition to their planing mill.

HAMPTON, N.B.—H. J. Fowler is taking tenders this week for alterations to the County buildings here.

GODERICH, ONT. — R. Parsons and Joseph Whitely purpose erecting new store buildings this year.

WINGHAM, ONT. — W. H. Green will build a block of stores, corner of Josephine and Patrick streets.

MOUNT ALBION, P. E. I.—Robert Jenkins has taken tenders for the building of a new school house here.

BRADFORD, ONT. — The Town Council are considering the establishment of a waterworks system here.

BERLIN, ONT.—Plans for the remodelling of the G.T.R. station here have been prepared, cost $10,000.

DUNREA, MAN. — J. H. Putman will receive tenders up to April 16th for $4,000 6 per cent. school debentures.

FORT QU'APPELLE, SASK. — Tenders have been taken by L. P'Ealapra for the erection of a school house.

MIDGELL, P. E. I.—Tenders have been taken by L. B. McMillan for the erection of a 50-foot steel bridge here.

SOUTHAMPTON, ONT. — The Baptist congregration are considering the building of a new church this season.

NIAGARA FALLS, ONT. — G. C. Brooks, of Fallsview, is interested in having an electric ore smelter built here.

BATH, ONT.—Max Robinson, Town Clerk, will receive tenders up to April 25th for a new bridge to be erected here.

MORRISBURG, ONT.—J. F. Howard, Montreal, has secured an option on a site for a stove manufacturing building.

SELKIRK, MAN. — H. W. Newton, Box 852, will receive tenders up to April 17th for $9,000 5 per cent. school debentures.

FREDERICTON, N. B.—Engineer Barbour has been instructed to prepare plans for new filtration plant to cost $60,000.

ST. CROIX, N.B. — The St. Croix Soap Manufacturing Company will erect a three-storey factory building, 55 × 50 feet.

PORT ARTHUR, ONT. — Thomas Hanley, architect, has taken tenders for the erection of a residence for N. N. Jopeland.

MOOSE JAW, ALTA. — John D. Simpson will receive tenders up to April 16th for construction of a dam on Moose Jaw Creek.

OWEN SOUND, ONT.—The plans for the Collegiate Institute addition have been approved and tenders will soon be called for.

FOREST, ONT.—R. Karr, Village Clerk, will receive tenders up to April 17th for excavation and construction of cement culverts.

WESTPORT, ONT. — B. Deacon, Village Clerk, will receive tenders up to April 21st for construction of cement sidewalks here.

GUELPH, ONT. — Tenders are invited by J. E. Hutcheon, City Engineer, up to 18th inst. for the annual supply of portland cement.

ARKONA, ONT.—W. J. George will receive tenders up to April 14th for remodelling the Baptist church here. J. W. Murray, architect.

NEW WESTMINSTER, B.C.—Mr. Brock, of Lynden, Wash., intends opening up a factory here for the manufacture of stump destroyers.

RED DEER, ALTA.—Tenders have been taken for excavation for one mile of canal near the town. Plans with the Great West Lumber Co.

FINGAL, ONT.—N. R. Darrach, architect, St. Thomas, has taken tenders for the erection of a brick church for the Presbyterian congregation.

CAMPBELLFORD, ONT. — J. L. Wilson & Son, architects, Chatham, Ont., will prepare plans for new church building here, cost $25,000.

DELHI, ONT.—Quance Bros. will build a concrete dam for the development of electric energy, from plans by J. S. Fielding, C. E., Toronto.

TERRA COTTA, ONT.—Toronto capitalists will build a concrete dam here. John S. Fielding, C. E., Toronto, is the engineer.

PARRY SOUND, ONT. — A depu-

(Open)

No. 10 Railroad Forge

An Old Friend In a New Dress

We illustrate herewith a forge equipped with the same blower and hearth as our well known No. 625 Forge, but more adapted to rough handling.

Tools can be locked in the hearth at night, and lever removed.

Railroad Contractors and Bridge Builders will find this outfit very convenient and strong.

Height to top of bowl 31 in.; size of hearth 18 in. x 18 in.; weight 125 lbs.

(Closed)

W. H. C. MUSSEN & CO.

Railway, Mining and Contractors' Supplies

MONTREAL

tation has asked the Minister of Public Works to have a dock and breakwater constructed here. Estimated cost $150,000.

HESPELER, ONT.—J. R. Phin will receive tenders up to April 10th for additions to the Methodist church here. Plans at post office or at Phin's drug store.

MIDLAND, ONT. — The Legislature has granted permission to the town to issue debentures for $20,920 for sewer construct on, and $30,000 for permanent sidewalks.

ROSTHERN, SASK. — Willis Chipman, C.E., Toronto, has reported regarding a system of waterworks for fire protection, also electric light and telephone systems, cost $30,000.

BROCKVILLE, ONT. — The Board of Works will receive tenders up to May 1st for lumber for sidewalks, salt glazed sewer pipes, Portland cement, cut and steel wire spikes and macadam.

STRATFORD, ONT.—The following building permits have been granted: A. F. Waddell, residence, Birmingham street; Mr. Schlotzhauer, residence, Water street; A. Knechtel, residence, Elm street.

HALIFAX, N. S.—Tenders will be received up to April 12th by F. Gelinas, Department of Public Works, Ottawa, for electric wiring and fixtures for the Custom House. Plans with C. E. W. Dodwell, resident engineer.

BARRIE, ONT. — Thos. Kennedy, architect, is taking tenders on a pair of brick houses for E.T. Tyrer, to be erected on John street, also on brick residences for Jas. Wynne and A Gendron, both of Penetanguishene.

SOURIS, MAN.—The Town Council have decided to replace the wooden sidewalks on the main streets with granolithic walks. — Trustee Board of the Methodtst church have decided to erect a new church, cost $12,000.

VEGREVILLE, ALTA. — Alanson, Gulley & Co. will build a large hotel here. —A large addition is to be built to the Queen's Hotel.—A public school is to be erected, cost $10,000.—The Presbyterian congregation will build a new church.

KENORA, ONT. — Tenders will be received by D. H. Currie, Town Clerk, or by T. Pringle & Sons, engineers, Montreal, up to April 16th for work in connection with the construction of water power development here. Plans with above named.

AMHERST, N. S.—The Nova Scotia Telephone Co. will receive tenders at 26 Saulter street, Halifax, for the erection of a brick and stone building, corner LaPlanche and Victoria streets. Plans at office of Company here or with H. E. Gates, architect, Halifax.

ST. MARY'S, ONT.—The Council will submit a by-law to provide $7,500 for road improvement and $2,000 for permanent sidewalks.—The Town Clerk will draft a by-law providing $2,000 to purchase a site for the new cordage factory.

WELLAND, ONT.—W. W. Wilson will receive tenders up to April 18th for an addition to the Mansion House. Plans with T. L. Nichols, architect, W. W. Nichols, architect, Niagara Falls, and with above named.—O. H. Garner has taken tenders for the erection of five frame dwellings here.

VICTORIA, B.C.—Hooper & Watkins, architects, have taken tenders for the erection of a residence corner of Cadboro Bay road and School street.—The Corporation has given notice that work will soon begin on construction of several cement sidewalks.

QUEB&C, QUE. — A syndicate of Quebec, Toronto and Montreal capitalists have a controlling interest in the Quebec Gas Co. and purpose improving the plant at a cost of $150,000. W. H. Pearson, Toronto Gas Company, is interested. — Tenders are invited by Ouellet & Levesque, architects, for a presbytery to be built at St. Ludger, Temiscouata county.

ST. JOHN, N. B.—S. L. Gorbell, manager of the Seamen's Institute, is soliciting funds for a new building, to cost about $10,000.—The Salvation Army expect to build a Provincial headquarters building on the site of the barracks on Charlotte street, to cost $12,000.

AURORA, ONT.—Tenders will be received by S. H. Lundy, Town Clerk, up to April 21st for a covered wooden tank 18 feet high and 23 feet 9 inches diameter, for the necessary steel trestle to support the tank and for a covered steel plate tank with supporting trestle.

BRANTFORD, ONT.—The trustees of the Y. W. C. A. are considering extensive improvements for Victoria Hall.—City Engineer Jones has recommended a sewer on Rawdon street to cost $71,000.—J. H. Schultz has taken out a permit for a residence on William street, cost $2,500.

SASKATOON, SASK.—A. Melville, architect, will receive tenders up to April 14th for construction of a block for the National Trust Company.—E. F. Hutchings, of the Great West Saddlery Co., has purchased a site for a factory, warehouse and store.—The Town Council will submit a by-law to raise $12,000 for addition to school.

PETERBORO, ONT.—E. M. Elliott, County Clerk, will receive tenders up to April 14th for construction of two steel highway bridges over the Indian river, also for concrete or stone abutments for Evans and Keene bridges over the Indian river. Plans with J. E. Belcher, C. E.—The Public Works Department, Ottawa, are preparing plans for the new armouries here.

EDMONTON, ALTA.—The following building permits have been issued: J. A. Paul, residence, Roland street, cost $1,900; D. W. McDonald, block, corner of Second and Jasper streets, cost $4,000.—C. V. Semerad and other business men propose organizing a company to build an opera house, cost $40,000.—The British Pacific Railway Co. are applying for a charter to build a road from Victoria, B. C., to this city.

CALGARY, ALTA. — A prominent company of Eastern Canada is decided to erect a large office building here to cost $150,000.—The following have been granted building permits: McDonald, Dunlop Co., warehouse, cost $8,000; Moodie & Co., hotel, cost $35,000; Jesse Morrice, residence, cost $1,500; Mrs. James Grant, residence, cost $1,400.

LONDON, ONT.—A. O. Graydon, City Engineer, will receive tenders up to April 12th for sewers on Dufferin avenue and Ontario street.—The congregation of Talbot street Baptist church have decided to build a new church, cost $50,000.—The Dominion Office & Store Fittings Company have applied for incorporation and purpose erecting a factory on Dundas street. D. H. Gillies is interested.

CHARLOTTETOWN, P. E. I.—L. B. McMillan has taken tenders for erection of a 70 foot steel bridge over the Dunk river.—Tenders will be received by the Secretary of Department of Railways and Canals, Ottawa, Ont., up to April 17th for the construction of two rest piers for the Hillsborough bridge, P.E.I. Specifications at office of Resident Engineer, this city, and of Chief Engineer, Moncton, N. B.

HAMILTON, ONT.—E. B. Patterson, architect, has taken tenders for alterations and additions to school buildings in S. S. No. 1, Barton.—The following permits have been issued: D. Barton, brick store, corner Barton and William streets, cost $2,600; T. W. Stewart, brick house, West avenue; Wm. Kirpatrick, brick house, corner Barton and McNabb streets, cost $1,900. — The T. H. & B. Railway will soon erect new shops on Garth street.—Stewart & Witton, architects, will receive tenders up to April 14th for the erection of a new theatre here.

TORONTO JUNCTION, ONT.—The Bank of British North America have purchased a site next to the post office on which it is understood they will erect a new building.—The Heintzman Piano Company purpose building extensions to their factory in the near future. —The Royce avenue Presbyterian congregation will build a mission church, to cost $5,000.—The Kerr Manufacturing Co. will erect a three-storey building on Pelham avenue.—J. G. Wright will erect a brick dwelling on Louisa street.—I. Woods will build a brick cottage on Mulock avenue.—J. Mooney will build several houses on Cooper avenue.

EAST TORONTO, ONT. — C. F. Wagner, architect, will receive tenders up to April 13th for the erection of a Masonic Temple at Balmy Beach. Same architect is preparing plans for four brick stores on Queen street near Luety avenue, cost $15,000.—Thomas Clayton has purchased a site, corner of Wheeler avenue and Queen street, on which it is expected a store will be built.—C. F. Wagner, architect, has purchased two lots on Hambly and two on Wineva avenues and will build houses thereon.

BRANDON, MAN. — G. F. Sykes will receive tenders up to April 12th for $90,000 4½ per cent. waterworks debentures.—The directors of the Agricultural Association purpose increasing their stabling accommodation at a cost of $6,000.—Messrs. Borbridge intend erecting a four-storey building 30×115 feet on Eleventh street, at a cost of $10,000.—Tenders have been taken for the erection of the new building for the Merchants'

ARMOURED PLATE
PUNCHES AND SHEARS

No. 42 in. Combined Punch and Shear

CANADIAN BUFFALO FORGE CO., LTD.
MONTREAL, QUE.

Bank here.—The City Engineer will ask for tenders for a new steam roller and second-hand stone crusher.

MONTREAL, QUE.—The Parks and Ferries Committee have approved of the plans for an overhead bridge from Berri street to the Ferry Landing, to cost $10,000.—The new Labor Temple which is proposed to be erected here will cost about $700,000.—J. R. Barlow, City Surveyor, gives notice that it is proposed to construct sewers in Dufferin and Dorion streets.—The Jesuit Fathers have taken out a permit for the erection of a new chapel, corner of Laurier avenue and Gilford street, cost $100,000.—The Board of Protestant School Trustees of St. Louis have secured $25,000 to build an annex to the school, corner of Esplanade and Fairmount avenue.

OTTAWA, Ont.—John Henderson, City Clerk, will receive tenders up to April 12th for construction of a swimming bath. Plans with M. C. Edey, architect. —F. Gelinas, Secretary Department of Public Works, will receive tenders up to April 18th for dredging at the following places: Penetanguishene, Meaford, Fesserton, Goderich, Point Edward, Port Stanley, Port Burwell, Rondeau, mouth of River Thames, Owen Sound, Nigger Island Channel and Trenton. Plans at the above mentioned offices.—F. Gelinas, Secretary Department of Public Works, will receive tenders up to April 18th for dredging at the following places in the province of Quebec: River du Loup, Yamaska river, Doucet's Landing, Hudson, Como, Rigaud, Ile Aux Foins, Blanche Shoals, Maskinonge river, St. Maurice river, River Ouelle, St. Placide, River Jesus, North river, L'Assomption river. Plans at the above named office.

VANCOUVER, B. C.—The Park Commission have instructed Parr & Fee, architects, to prepare plans for addition to the bathing pavilion at English Bay, cost about $2,400.—E. E. Blackmore, architect, has taken tenders for the erection of a hotel corner of Cordova and Seymour streets for Baron Cope.—The British Columbia Electric Railway Co. intend erecting storehouse, shops and car barn on Westminster avenue.—C.S. Battle has purchased part of the property of the Western Canadian Fish Company on which it is said he will build a large mill. —The Civic Water Committee have taken tenders for water meters. — The Anglo-American Lumber Co. purpose erecting a large saw mill on Burrard Inlet, cost $100,000. R. H. McKee is interested.

FORT WILLIAM, ONT.—S.F. Flatt will build a brick apartment house corner of Miles and Archibald streets, to cost $12,000. — H. R. Halton, architect, is preparing plans for a hotel at Westfort, to cost $20,000.—Some Port Arthur business men will build a block on Simpson street, to cost $20,000.—J. C. Stinson, architect, is preparing plans for the following: F. Symes, brick dwelling on Archibald street, cost $4,500; T. Dow, brick residence on Archibald street, cost $2,800; Dr. Mitchell, brick residence on Archibald street, cost $5,500; L. L. Peltier, brick store on May street, cost $10,000; A. J. Timbers, brick hotel on May street, cost $25,000; H. J. Tharle, brick tenement house on Dease street, cost $6,000; H. Harkness, brick store at Westfort, cost $2,500; Street Bros., two-storey block on Syndicate avenue; A. McDonald, brick dwelling on Brodie street, cost $2,500; A.W. Frodsham, two-storey block corner May and Miles street. — Superintendent

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Jones has been instructed to proceed with the building of a new electric light sub-station, cost $10,000.

WINNIPEG, MAN. — Darling & Pearson, architects, are taking tenders this week for the erection of a residence on Kingsway.—The Winnipeg Rowing Club are discussing the construction of a new boat house, at a cost of about $15,000. —The Ministerial Association are discussing the erection of a chapel at the General Hospital, to cost $5,000.—The Works Committee have recommended that the construction of the following works be advertised : Asphalt pavements —Wardlow avenue, from Wellington Crescent to Guelph street, cost $24,500 ; on Scotia street, from Cathedral avenue north to City limits, cost $10,172. Sewers—Clare avenue, from Pembina to Fisher street, cost $3,570 ; Fisher street, from Balfour to Clare, cost $1,120 ; Mountain avenue, from McKenzie to Garlies street, and Garlies street, from Mountain avenue to Machray, cost $15,-532 ; McGregor street, from St. John avenue to Mountain, and Mountain avenue, from McGregor street to McKenzie, cost $11,808 ; Winnipeg avenue, from east line of C.P.R. to McPhillips street, cost $3,670.—J. H. Cadham, architect, will receive tenders up to April 14th for erection of a block on Edmonton street for Barrett Bros.

TORONTO, ONT.—T. E. Washington, real estate broker, has sold a site at corner of Avenue road and Chicora street to Isaac W. Plewes on which five brick houses will be erected, also a site on Euclid avenue to W. J. Cole for a brick residence and one on Pape avenue to R. Lancon for a pair of houses.—The Board of Control will receive tenders up to April 17th for the erection of the press building at the Exhibition grounds. G. W. Gouinlock, architect.—Burke & Horwood, architects, are preparing plans for a new Science building for McMaster University, to cost about $100,000—J. J. Walsh, real estate dealer, is preparing to erect two houses on Wilson avenue, a residence on Springhnrst avenue, to cost $8,000, and two residences in Rosedale, to cost $14,000. He has sold a site on Queen street to R. Wilson for three stores. He also expects to build several houses on Stuart street.—The Advisory Board of St. Clement's church are considering building an addition to their church.—George Faulkner, real estate broker, has sold a site, 38 Olive avenue, to C. Roberts for a store building.—F. W. Stair, proprietor of the Star theatre, has purchased the property at northwest corner of Bond and Queen streets on which he intends erecting a theatre to cost $75,000.—It is stated definitely that work on the new Shea theatre, corner of Victoria and Richmond streets, will begin at once.—A. G. Strathy & Co. real estate dealers, have sold a site at corner of Howland and Bloor streets for two stores and dwellings, also a lot on Ossington avenue to W. R. Switzer for a dwelling. They have sold the property at 143 Simcoe street, which is to be remodelled into a free dispensary, and the Federal block, corner of Victoria and Lombard streets, to W. S. Dinnick, to which it is expected that alterations will be made ; also the property corner of Adelaide and Duncan streets, which will be altered as a flat building for light manufacturing.—The Sharples Separator Co. have purchased a site, corner of Dundas and Vincent streets, for the erection of a large factory.—The Board of Management of Knox College are almost unanimous in favor of the erection of a new building near Toronto University, estimated cost from $300,000 to $400,-000.—George S. McConkey has bought the property at 90 Jarvis street and will have it remodelled for manufacturing

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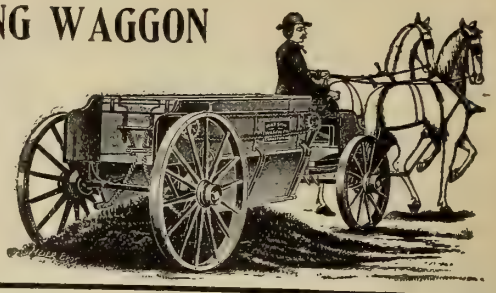

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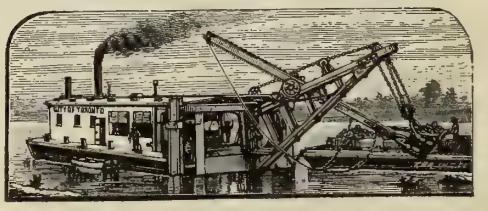

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confectionery. — Building permits have been issued as follows: Eugene Coste, 2-storey and attic brick dwelling, Poplar Plains road, cost $7,000; H. J. and E. R. Reynolds, two 2½-storey brick dwellings, Dundonald street, near Church, cost $8,000; John Peacy, 2-storey brick and roughcast dwelling, Seaton square, near Palmerston avenue, cost $1,800; James Cairns, 1-storey stone and brick store and dwelling, 1289 Bloor street, cost $2,300; Hedges Bros., three 2-storey and attic frame dwellings, Bellwoods avenue, near Croaker street, cost $6,000; I.W.Plewes, two pair 2-storey and attic stone and brick dwellings, Chicora avenue, near Avenue road, cost $13,000; S.Napolitano, 2-storey and attic stone and brick dwelling, Woodlawn avenue, near Yonge street, cost $3,750; E. B. Freeland, 2½-storey brick dwelling, Chestnut Park road, cost $9,000; J. Macdonald, pair 2-storey brick and roughcast dwellings, 17 and 19 Cumberland street, cost $3,600; Wm. Lightle, pair 2½-storey brick dwellings, Victor avenue, cost $4,500; W. R. Munbery, 2-storey brick hotel, corner Simcoe and Front streets, cost $6,000; Dr. I. Butler, pair stone and brick dwellings, Grace street, near College, cost $4,800; E. R. French, 2½-storey brick dwelling, Beaconsfield avenue, near Argyle street, cost $2,700; J.H.Carman, 2-storey and attic frame dwelling, Lee avenue, near Queen street, cost $2,500; Caleb Evans, pair 2-storey and attic stone and brick dwellings, Palmerston boulevard, near Harbord street, cost $8,000; McCauley & Bishop, pair 2-storey and attic stone and brick dwellings, Brunswick avenue, near Bloor street, cost $5,500; A. Nelson, pair 2-storey and attic stone and brick dwellings, Palmerston boulevard, near College street, cost $10,000; W. G. Simpson, pair 2-storey and attic stone and brick dwellings, 426 and 428 Deleware avenue, cost $4,500; E. Sellers, 3-storey stone and brick store and dwelling, College

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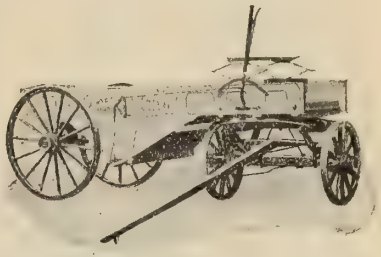

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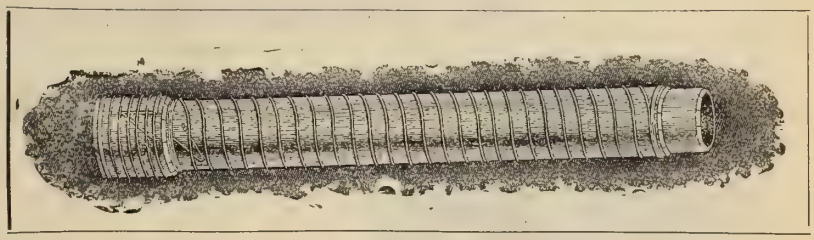

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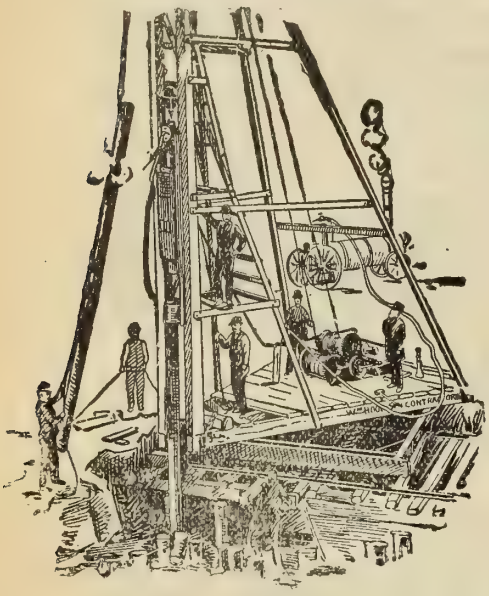

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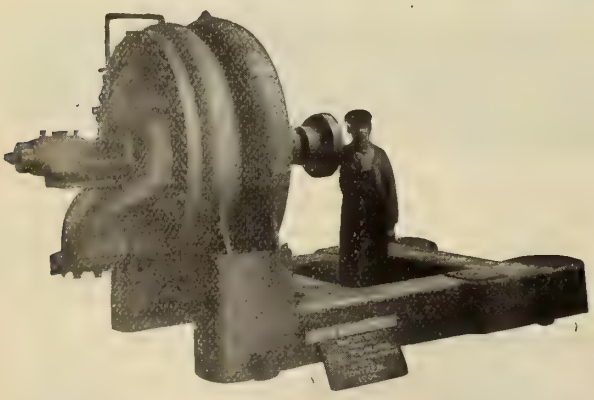

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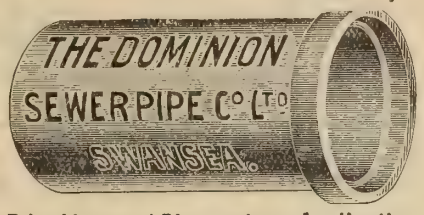

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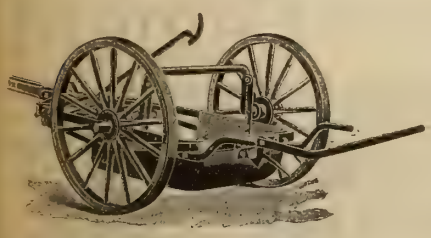

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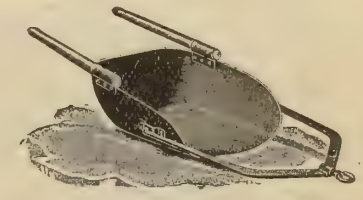

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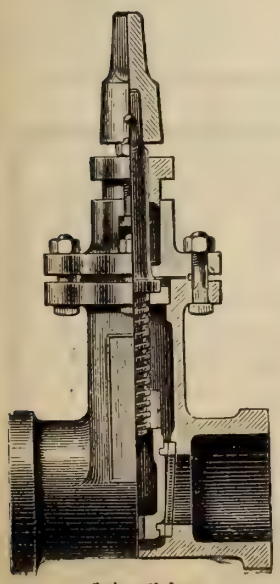

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street, near Euclid avenue, cost $3,800; Amos Shunk, pair 2-storey and attic brick dwellings, Deleware avenue, cost $7,000; Taylor & Nesbitt, pair 2 -storey stone and brick dwellings, 14 and 16 Havelock street, cost $6,000; F L. Beecroft, 2½-storey stone and brick dwelling, Roxborough street west, near Yonge, cost $4,000; Geo. Sparling, 2½-storey brick dwelling, corner Dufferin street and Lindsay avenue, cost $3,000; Moore & Davis, pair 2-storey roughcast dwellings, Lansdowne avenue, near Lappin street, cost $3,600; Huylers, alterations to 4-storey stone, brick and steel store and factory, 130 and 132 Yonge street, cost $20,000; W. O. McTaggart, 2-storey and attic brick dwelling, 258 Deleware avenue, cost $4,000; Dr. J. H. Auger, 3-storey brick dwelling, Chestnut Park road, cost $9,000.

CONTRACTS AWARDED.

SHUBENACADIE, N.S.—Presbyterian manse: G. Forbes, contractor.

SASKATOON, SASK.—J. H. Armstrong, C.E., and S.D. Lake, contractors, of Hanley, Sask., will build 50 miles of G.T.P.R. eastward from this town.

STELLARTON, N.S.—M.P. McNeil & Company, of New Glasgow, N.S., have the contract for a number of buildings for Acadia Coal Company, to cost $50,000.

GOLDEN, B.C.—The contract for construction of ten miles of the Kootenay Central Railway southward from this town has been awarded to the General Contract Company, of Vancouver.

NIAGARA FALLS SOUTH, ONT.—Addition to residence for Mr. Paine, banker: Masonry and brick work, S. E. Miller; carpenter work, E. McCredie; plumbing and metal work, S.R. Ward.

VANCOUVER, B.C.—Laying of basement drain on Hastings street: Boyd, Clandening & Company, contractors, $5,128.—Addition to Atlantic Saloon on Cordova street: Smith & Sherburne, contractors, cost about $15,000.—Cedar Cove school building: Peter Tardff, successful tenderer, at $9,095.

GODERICH, ONT.—Huron & Perth County Council have awarded the contract for construction of two bridges on the County boundary between McKillop and Logan townships as follows: Concrete work, Hemsworth & Eckmire, of Ethel, at $4.25 per cubic yard; steel superstructures, A. Hill & Company, Mitchell, at $530.

COBOURG, ONT.—The Counties Council have accepted the following tenders for construction of jail: Carpenter and joiner work, Henderson Bros.; heating, plumbing and metal work, A. R. Dundas; masonry, brickwork and plastering, Jex & Company; painting and glazing, H. Dell; cells and steel work, Van Dorn Iron Works Company, Cleveland, total cost $41,745.

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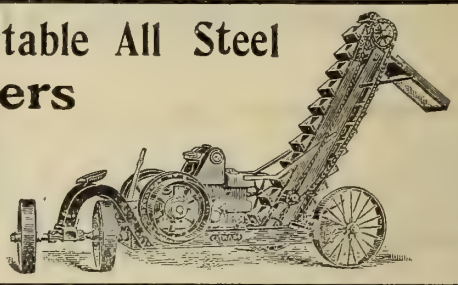

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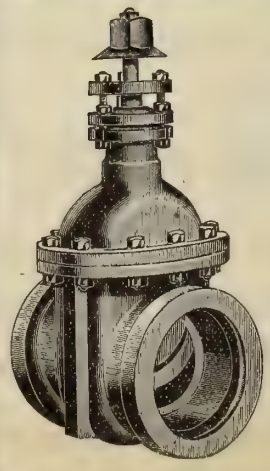
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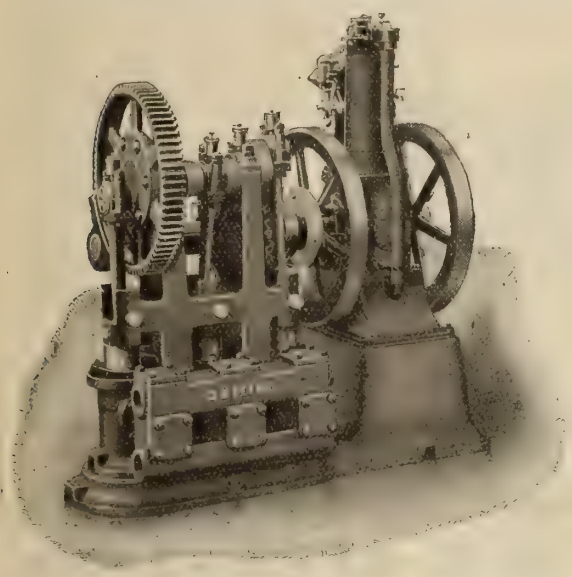

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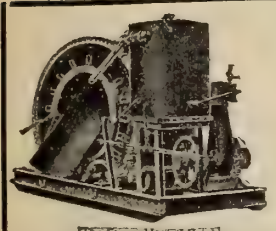
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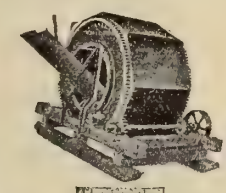
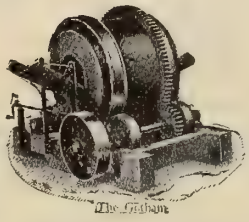
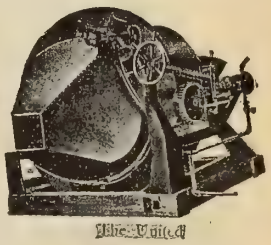

The Stanley

The International


The Graham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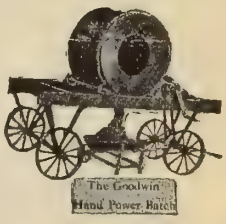
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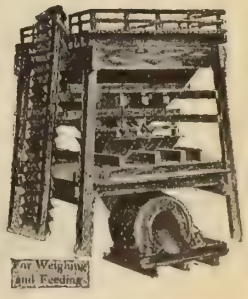
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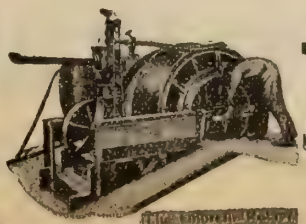

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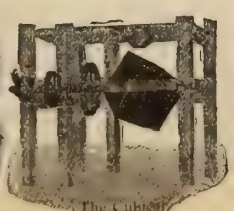
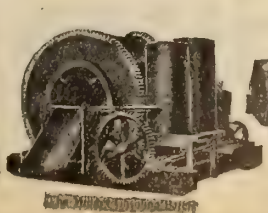

The Cubical



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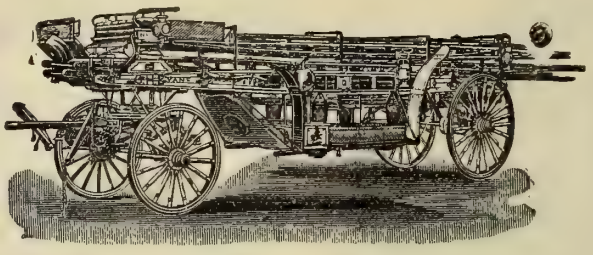

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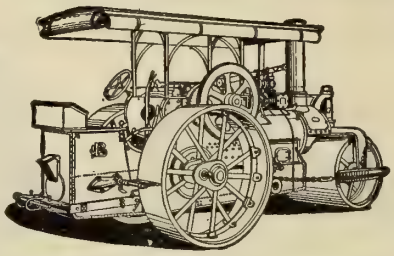

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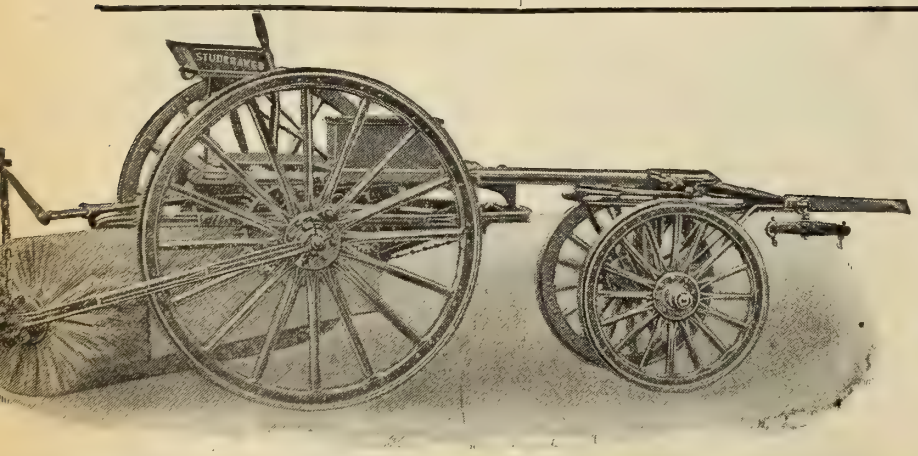

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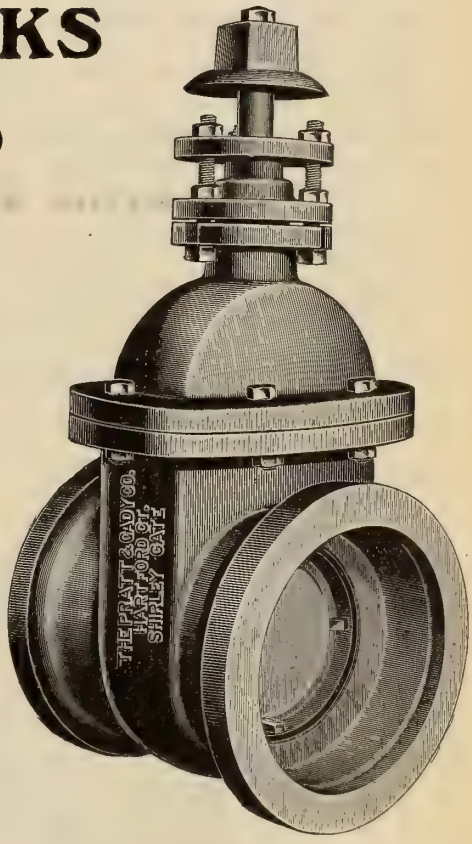

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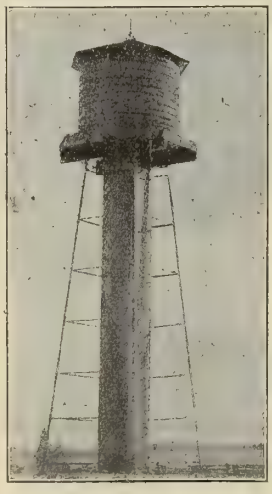

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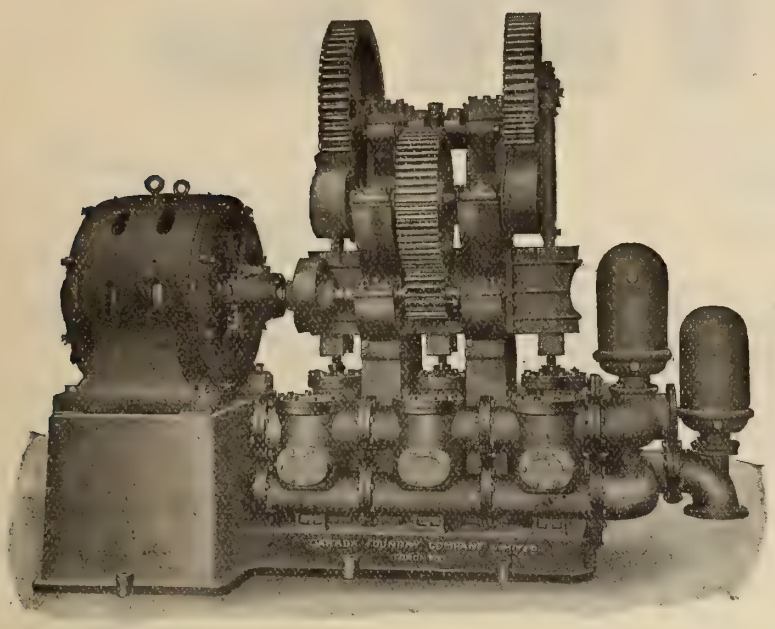

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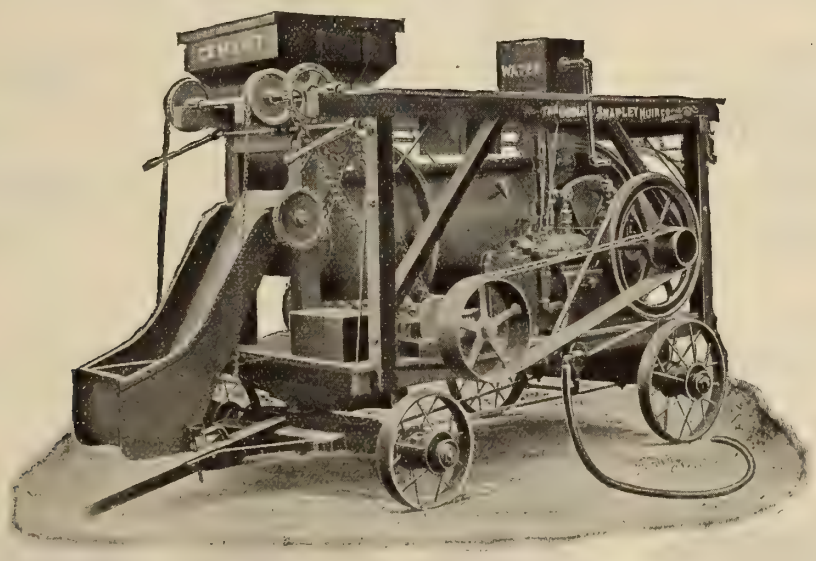

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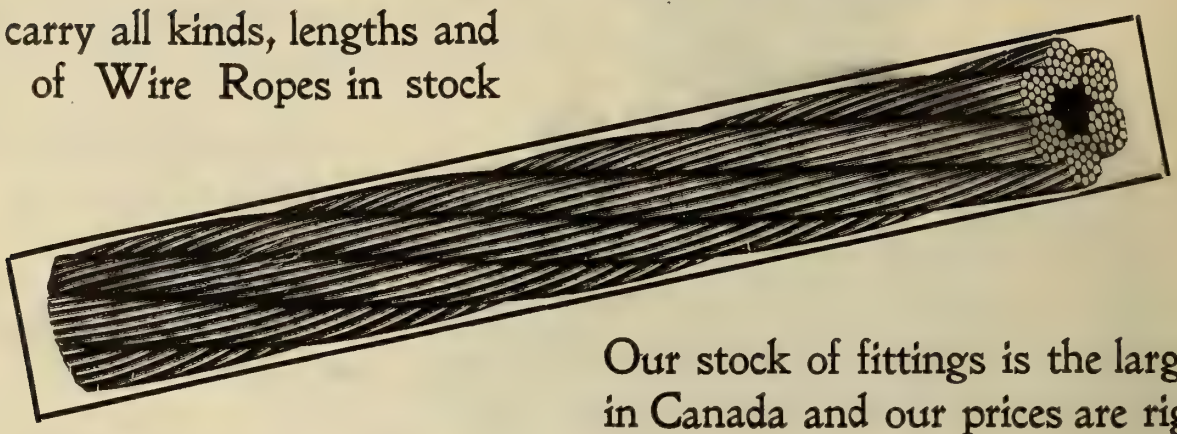

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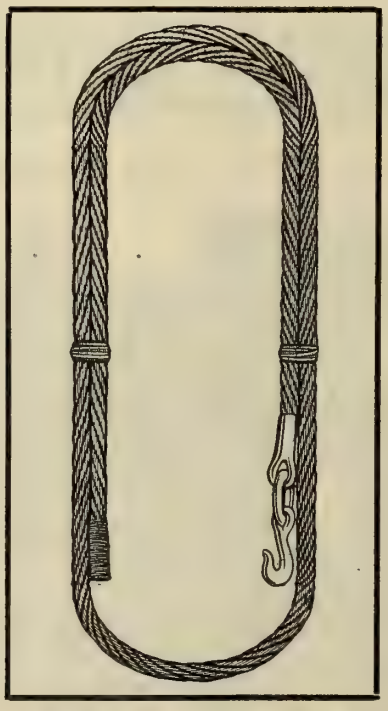

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TO SURVEYORS

Young man would like to join surveying party. Address "SURVEY," care CONTRACT RECORD, Toronto.

WANTED

Two Cement Sidewalk Finishers

for the City of Regina. Offers will be received by the undersigned up to TUESDAY, MAY 1ST, 1906. Applicants will state their qualifications and experience, also salary required.

ANGUS SMITH,
City Engineer.
Regina, April 11th, 1906.

TENDERS

for

SUPERSTRUCTURE FOR STEEL BRIDGE

ETC.

Proposals will be received by the undersigned up till noon on MONDAY, THE 7TH DAY OF MAY, 1906, for the erection of a steel rivetted truss bridge, 120 feet clear span, 16 feet clear roadway, to carry a 6 inch concrete floor and a live load of 100 lbs. per square foot. The bridge to be erected over the River Canard between the Towships of Anderdon and Sandwich West, in the County of Essex, 6 miles from Amherstburg.

JOHN F. MILLEN,
County Clerk of Essex,
Sandwich, Ont.
Sandwich, April 14th, 1906.

TENDERS

Sealed tenders, marked "Tenders for Sidewalks," will be received by R. M. Thompson, Acting Clerk of the Town of Blenheim, up to 7 o'clock p.m. on MONDAY, APRIL 30TH, 1906, for the construction of certain Cement Sidewalks and Crossings in the Town of Blenheim.

The said work to be constructed according to the plans and specifications of Geo. A. McCubbin, Esq., Town Engineer, which may be seen at the Clerk's office on and after this date.

A detailed list of the work to be done can be obtained from the Acting Town Clerk.

As security for the work the Council will retain fifteen per cent. of the contract price for the space of five years, allowing bank interest thereon.

T. K. MORRIS,
Chairman Board of Works, Blenheim.
Blenheim, April 10th, 1906.

TOWN OF PERTH

TENDERS

Sealed tenders will be received until six (6) p. m., MONDAY, APRIL 30, 1906, for the furnish- of all materials and labor, for the construction of all concrete sidewalks and crossings in the Town of Perth, that the Municipal Council of the Town of Perth may desire to construct during 1906.

Tenders to be addressed to John A. Kerr, Town Clerk, Town of Perth, Ont.

An accepted cheque for $200.00 must accompany each tender.

The lowest or any tender not necessarily accepted.

For forms of tender, specifications and all other information apply to

HARRY WELCH, Town Engineer,
Box 255, Perth, Ont.

TEMISKAMING and NORTHERN ONTARIO RAILWAY

TENDERS FOR GRADING

Sealed tenders, addressed to the undersigned, will be received until 12 o'clock noon on TUESDAY, APRIL 24TH, 1906, for all the work, excepting the ballasting and track laying, connected with the building of an extension from the present existing tracks at North Bay Junction to Nipissing Junction, a distance of about three miles.

And also for an extension from North Bay Junction to Regina street, in the Town of North Bay. Plans and specifications will be on exhibition at the office of the Commission, 25 Toronto street, Toronto, and at the office of the Chief Engineer, North Bay, Ont.

Tenders must be made on printed form which will be provided by the Commission.

The Commission will not be bound to accept the lowest or any tender.

H. W. PEARSON, Secretary-Treasurer,
25 Toronto Street, Toronto.

Papers inserting this advertisement without authority will not be paid for same.

Debentures for Sale

Sealed tenders will be received up to noon of SATURDAY, APRIL 28TH, 1906, for the purchase of $4,700 High School Debentures of the Town of Oshawa, dated April 2nd, 1906, bearing interest at 4½ per cent. per annum and repayable at the office of the Treasurer, Oshawa, in 20 equal annual instalments of principal and interest. The highest or any tender not necessarily accepted.

THOS. MORRIS,
Town Clerk.

NOTICE TO CONTRACTORS

Tenders will be received, addressed to the undersigned and marked "Tender for Trenching," up to noon on APRIL 25TH, 1906, for Trenching for water and sewer pipes according to plan and specification.

Approximate distance to be excavated about 5,000 lineal feet. Rock (slate) 5,000 cubic yards. Earth 1 400 cubic yards.

Also for Trenching for a sixteen inch water pipe for a distance of about 10,000 lineal feet, mostly earth.

Tenders will be received for the whole or sections of the work.

Plans and specifications can be seen at the office of the Superintendent of Water Works, Dartmouth, N. S.

Each tender must be accompanied by a certified cheque, payable to the Town Treasurer of Dartmouth, for the sum of $400, which will be subject to forfeiture in case of failure on the part of the contractor to enter into a written contract with approved sureties, if called upon to do so.

The Town of Dartmouth reserves the right to reject any or all tenders or to accept any bid which appears advantageous to the Town.

ALFRED ELLIOTT,
Town Clerk.
Dartmouth, N. S., March 29, 1906.

Temiskaming and Northern Ontario Railway Commission

TENDERS FOR ROUNDHOUSES

Sealed tenders, addressed to the undersigned, 25 Toronto Street, Toronto, and marked "Tender for Roundhouses," will be received up to 12 o'clock, noon, on the 26TH DAY OF APRIL, 1906, for the erection complete of the following:

One 12 Stall Engine House and Machine Shop 126 ft. by 50 ft., with boiler house and coal room, at the Town of North Bay.

One 8 Stall Engine House and Machine Shop 63 ft. by 50 ft., with boiler house and coal room, at Englehart, 138 miles from North Bay.

Plans and specifications are on exhibition at the Chief Engineer's office, North Bay, and at the office of the Secretary-Treasurer, 25 Toronto Street, Toronto.

A marked cheque for $5,000, payable to the order of the Chairman and Secretary-Treasurer, must accompany each tender (which must be made on the form supplied by the Commission) and which will be returned to unsuccessful tenderers.

The Commission is not bound to accept the lowest or any tender.

H. W. PEARSON,
Secretary-Treasurer.
Toronto, April 13th, 1906.

Papers inserting this advertisement without authority will not be paid for same.

[FOR ADDITIONAL ADVERTISEMENTS FOR TENDERS SEE NEXT PAGE.]

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C. H. CLARKE,
Gananoque, Ont.

TENDERS

separate or in bulk, will be received by the undersigned up to 5 p m. on WEDNESDAY, 25TH INST., for the erection of a Hotel Building on Terauley Street.

The lowest or any tender not necessarily accepted.

A. W. HOLMES, Architect,
10 Bloor Street East, Toronto.

TENDERS

separate or in bulk, will be received by the undersigned up to noon of SATURDAY, 5TH MAY, for the trades required in the erection of a Physics Laboratory in Queen's Park for the University of Toronto.

Plans and specifications may be seen and all information obtained on application to

DARLING & PEARSON, Architects,
2 Leader Lane, Toronto.

The lowest or any tender not necessarily accepted.

To Paving Contractors

Sealed tenders, addressed to the Chairman of the Committee on Works, will be received by the City Clerk, St. Catharines, Ont., until 12 o'clock noon, on MONDAY, 30TH INST., for about 16,000 square yards of paving with vitrified brick upon concrete foundation and about 2,500 lineal feet of 5" stone curbing on St. Paul Street, in the said city.

Plans and specifications may be seen and form of tender obtained at the office of the City Engineer on and after the 20th inst.

The lowest or any tender not necessarily accepted

R. E. SPEAKMAN,
City Engineer,
April 10, 1906. St. Catharines, Ont

CONTRACTS OPEN.

PARIS, ONT.—The G.T.R. will build a new passenger station.

LANGHAM, ALTA.—Mr. Peter will build a hotel here this season.

KEEWATIN, ONT.—The Oddfellows will erect a hall here this summer.

HAMIOTA, MAN.—It is understood that A. Kelly will build a new hotel.

EDMONTON, ALTA.—R. B. Croon intends enlarging the Alberta Cafe.

BEAMSVILLE, ONT.—Plans for a new canning factory are being prepared.

BRIDGEWATER, N.S.—Plans have been prepared for a new Lutheran church here.

SUSSEX, N. B.—A site has been chosen for the new school building, cost $25,000.

PORT ROWAN, ONT. — Joseph Pierce will build two new houses on Ellis street.

BATH, N.B.—B. F. Smith, M.P.P., is interested in a saw and lath mill to be built here.

QU'APPELLE, SASK.—The Northern Bank will erect a new building here, cost $10,000.

MARKHAM, ONT.—M. C. Selby will erect a residence and shop on the site of his present shop.

MIMICO, ONT. — Plans are being prepared for a cement building for the Railroad Y.M.C.A.

VERNON, B. C.—The Council are considering the installation of a sewerage system, cost $25,000.

MITCHELL, ONT. — Subscriptions are being solicited to aid Mr. Thompson in rebuilding his mill.

PARRY SOUND, ONT.—Plans are being prepared for the new brick residence to be erected this summer for the jailer.

STRATHCONA, ALTA. — The citizens are discussing the issue of $35,000 electric light debentures.

REGINA, SASK.—The City Council are considering the improvement of the fire hall and fire fighting apparatus.

MONCTON, N.B.—The City Council are considering the remodelling of the opera house, to cost about $10,000.

BERLIN, ONT.—St. Andrews Presbyterian church have decided to erect a new building this summer, cost $25,000.

NORTH BAY, ONT.—The Trustees of the Methodist church are soliciting subscriptions for a new church building.

BLENHEIM, ONT.—T. K. Morris will receive tenders up to April 30th for construction of cement sidewalks in the town.

PORT ARTHUR, ONT.—A government architect will report on the necessary alterations to the post office building here.

LEASKDALE, ONT.—A. Cook will receive tenders up to May 1st for erection of a Presbyterian church. Plans at his store.

KENORA, ONT.—G. M. Roich will receive tenders up to April 21st for erection of a two story stone and brick building.

QUEBEC, QUE.—The plans for the new Protestant school on St. Joachim street have been accepted, cost over $30,000.

SACKVILLE, N. B.—H. H. Mott architect, has completed plans for an addition to the warehouse of the Enterprise Foundry Co.

PORT HOPE, ONT.—The congregation of Mill street Presbyterian church purpose making extensive improvements to the building.

CORBYVILLE, ONT. — Tenders have been taken by the H. Corby Distillery Co. for the erection of a brick storehouse here.

CORNWALL, ONT.—The Canada Architectural & Engineering Co. are preparing plans for a new building for St. Paul's Home.

MOOSE JAW, SASK.—Jones & Banyard, architects, have taken tenders for the erection of a house on Main street for J. R. Green.

EGLINTON, ONT.—G. Dixon will erect a residence on Broadway.—The Misses Nichols intend erecting a house on Roper avenue.

WHALEN, ONT. — F. Morley, Clerk, will receive tenders up to May 4th for construction of drainage work, estimated cost $1,859.

WINGHAM, ONT.—A by-law is to be submitted to the ratepayers for constructing a trunk sewer on the main street, cost $6,000.

COLBORNE, ONT. — F. W. McDonagh will receive tenders up to May 21st for purchase of $6,000 4 per cent. township debentures.

ORILLIA, ONT.—Croker & Hoy, architects, have prepared plans for a three-storey building to be erected on Peter street for R. R. Slaven.

EMERSON, MAN. — Mr. Evans, architect, has been instructed to call for tenders for school building according to plans submitted to the Board.

GRANDVIEW, MAN. — William Dickie will receive tenders up to May 12th for purchase of $7,500 4 per cent. Berry Hill school debentures.

PETROLIA, ONT. — H. Branston has taken tenders for the erection of a school building here. J. L. Wilson & Son, Chatham, architects.

BELLA COOLA, B.C.—It is said that A. E. Williams and City Attorney Hart, of Vancouver, will erect a pulp mill here to cost over $1,000,000.

WAYERTON, N.B. — James Urquhart will receive tenders up to May 1st for erection of school house above Chaplin Island. Plans with Henry Allison.

LEAMINGTON, ONT. — Tenders will be received up to April 30th by A. Baird, C.E., for construction of Gore Atkin drain. Plans with James Honor.

BELLEVILLE, ONT.—Tenders will be received up to April 24th for the erection of Victoria avenue Baptist church. Plans with Stroud Bros., Front street.

WOODSTOCK, ONT.—Plans for the extension of the Collegiate Institute have been approved by the Department of Education and work will begin at once.

RENFREW, ONT.—J. K. Rochester, Town Clerk, will receive tenders up to April 21st for construction of a concrete arch culvert over Smith's Creek in this town.

AYLMER, QUE.—The Minister of Public Works has been petitioned to have a breakwater constructed on Lake Deschenes between Hotel Victoria and Queens Park.

NAPANEE, ONT.—W. A. Grange, Town Clerk, will receive tenders up to May 1st for plank, portland cement, rubble, etc., also for work in building sidewalks, pavements, etc.

LLOYDMINSTER, SASK. — The School Board have decided to build a four-roomed brick school house.—It is understood that an Edmonton firm will erect a large flour mill here.

WEYBURN, SASK. — A. Anderson has taken tenders for building a school in Rockfield, S.D.—Mr. Walker, manager of the Saskatchewan Lumber Co., will erect a residence here.

ROSTHERN, SASK.—The School Board will advertise for tenders for erection of a new brick and stone school building.—B. J. Friesen is interested in a scheme to erect a hospital here.

GODERICH, ONT.—The Huron & Perth County Council purpose erecting two bridges on the boundary between Grey and Elma townships. Ansley & Donaldson are to prepare plans.

CARDINAL, ONT. — Tenders will be received by L. K. Jones, Secretary Department Railways and Canals, Ottawa, up to April 19th, for constructing a wharf here. Plans at engineer's office.

BRANDON, MAN.—The by-law to raise $80,000 for new school buildings was carried.—The plans of Mr. Sinclair, architect, for an eight-roomed school building, have been approved, brick and stone, cost $40,000.

GUELPH, ONT.—F. Gelinas, Secretary Department of Public Works, Ottawa, will receive tenders up to May 1st for the construction of an armory. Plans with above named and with caretaker of public building here.

VEGREVILLE, ALTA.—Plans are being prepared for the new Merchants' Bank building, cost $10,000. — The Roman Catholic congregation have secured an option on a site for a church building.

PETERBORO, ONT.—It is understood that considerable extensions will be made to the gas plant here.—A site has been selected for an Isolation hospital here, cost about $6,000.— James Stubbs will build two brick houses east of George street.

CALGARY, ALTA.— William Angle will build four houses on Sixth avenue.—E. L. Chudleigh will erect a residence in Rouleauville.—L. K. McGuffin expects to build a residence here.—Mr. Sheppard expects to build a block of stores,

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MONTREAL

corner of Tenth avenue and First street H.H. Oliver will build a store on Stephen avenue.

VICTORIA, B. C. — S. Maclure, architect, has taken tenders for the erection of a dwelling on Church Hill.—J. B. Hobson has secured capital to build seventeen miles of canal to bring water to the claims of the Cariboo Consilidated Company.

INDIAN HEAD, SASK.—The following buildings are contemplated: Block on Main street for the H. H. Campkin Co.; block for the Bank of Hamilton, and residences for A. G. Orchard, H. B. Gardner, E. Williams and A. M. Fraser.

ST. BONIFACE, MAN. — Blair & Northwood, architects, Winnipeg, have taken tenders for the erection of a bank, store and office building here.—G A. Rocan will receive tenders up to April 23rd for $30,000 5 per cent. school debentures.

HAMILTON, ONT. — The Barton Street Methodist church will build a new parsonage on Sanford avenue.—T. W. Watkins will build a new block on Hughson street.—The Norton Manufacturing Co. have plans prepared for an extension to their buildings.

ST. MARY'S, ONT.—F. E. Butcher intends erecting large cooperage works on a site recently purchased.—The date for receiving tenders for $16,912.35 4 per cent. town debentures has been extended to May 4th, and they will be sold in blocks of $100 and upwards.

MARSOUINS, QUE.—F. Gelinas, Secretary Department of Public Works, Ottawa, will receive tenders up to May 10th for the construction of a wharf here. Plans with above named and at office of P. Beland, post office building, Quebec, C. Desjardines, post office building, Montreal, and at post office here.

STRATFORD, ONT. — The following building permits have been granted: A. Williamson, brick residence, Albert street; D. McGregor, brick residence, Albert street; John Etty, residence, Avon street; J. M. Lillow, residence, William street; Miss Steet, two residences, Inverness street.

CHATHAM, ONT.—J. L. Wilson & Sons, architects, will prepare plans for remodelling the market building, cost about $3,000.—W. N. Morley will receive tenders up to April 28th for heating and ventilating 20-roomed school building.

OTTAWA, ONT. — Tenders have been taken by William Rea for the erection of an addition to Creighton street school.—The Transcontinental Railway Commission will soon call for tenders for 50,000 tons steel rails, also fastenings and ties.—The Board of Works have decided to lay an asphalt pavement on Elgin street, from Albert to Argyle avenue, also on part of Bell street.

PORTAGE LA PRAIRIE, MAN.—The Imperial Oil Co. will erect a large warehouse here.—B. Bowser will build a two-storey brick house, corner of Campbell street and Lorne avenue.—The Lake-of-the-Woods Milling Co. intend building a large oatmeal elevator here.—It is announced that the C. P. R. will remodel their yards and freight sheds at a cost of $26,000.

SARNIA, ONT. — James Spearman will receive tenders up to April 20th for building an extension to the library building. Plans with G. A Proctor, 134 Euphemia street.—J. D. Stewart, Town Clerk, has taken tenders for digging, laying tile and filling of sewers on Maxwell, Talfourd and Russell streets.

HALIFAX, N. S. — The Canadian Locomotive Construction Co. have purchased a site and expect to establish a plant here at an early date.—Henderson & Potts, paint manufacturers, are promoting a project to establish lead corroding works here.—The School Board purpose erecting a High school for St. Patrick's girls on Brunswick street.—A bill has been introduced into the Legislature to build a railway from Dartmouth to Gnysboro.

WELLAND, ONT.—H. W. Macomb will have his residence, which was recently damaged by fire, reconstructed this season.—C. S. Peaslee, of New York, has made proposals to the Board of Trade regarding the establishment of a shoe factory here, three stories, 150 x 50 feet, cost $30,000.—Judge Muehlfeder, of Albany, N. Y., and other capitalists have been in town making arrangements for the erection of the large steel works here.

LONDON, ONT.—Moore & Henry, architects, will receive tenders up to April 20th for erection of St. Paul's Evangelical church on Wellington street.—W. G. Murray, architect, has taken tenders for erecting a factory building for Dominion Office & Store Fitting Co.—George White & Son have procured a site on Rectory street for extension of their engine and boiler works.—It is stated that the Toronto Canning Co. intends locating here.

NEW WESTMINSTER, B. C.—L. S. Lusby will erect a residence on Royal avenue, cost $3,500.—The Works Committee have recommended the construction of a main sewer on Fourth street.—Major Pearson & Company have sold the Blackie estate at Mud Bay on which it is said a large summer hotel will be erected.—It is reported that options have been secured on part of the Reilly estate at Sapperton for a hotel building.—A by-law will be submitted to the ratepayers to raise $10,000 to add a wing to the Central school.

VANCOUVER, B. C. — Honeyman & Curtis, architects have taken tenders for the erection of St. John's Presbyterian church.—H. E. Rines has bought the Glasgow Hotel and will have it altered considerably.—Tenders have been taken by the Secretary of the School Board for erection of a four roomed building at Fairview West, also for repairs to Fairview school, corner Ninth avenue ond Granville street.—The Sobey Lumber Company, of Ballard, Wash., are looking for a site on Burrard Inlet for a large saw mill.—The Methodist congregation of Mount Pleasant have decided to construct a new church, cost $25,000.

SASKATOON, SASK.—W. W. LaChance has taken tenders for erection of a block for J. F. Cairns, and has completed plans for the Bowerman building, corner of Twenty-First street and Second avenue.—E. S. Blain purposes erecting a two-storey building on Second avenue, also a branch drug store in Riversdale.—The congregation of St. John's church expect to build a new rectory this season.—W. H. MacBeth and A. E. Young will erect a two-storey building, brick, 50 x 65 feet, corner Twenty-Second street and Second avenue.

MONTREAL, QUE.—The Sisters of the Holy Cross will erect a school on Centre street, cost $30,000.—A permit has been issued for a new school on St. Germain street, cost $28,000.—W. J. Martin has plans prepared for the erection of a ten-story hotel on Windsor street, at a cost of about $100,000.—Building permits have been granted to the Sisters of Jesus and Mary to erect a convent on Rachel street, cost $30,000, to Robert Archer for a residence at 1184 Sherbrooke street, cost 13,000, and to Mrs. A. J. Carter for a residence on Pine avenue, cost $11,000.

BRANTFORD, ONT. — The Public School Board have recommended the City Council to pass a by-law empowering them to erect an eleven roomed school on Murray street, addition of four rooms to Darling street school and four rooms to Huron street school. — The Brantford Roofing Co. will build a factory on Sydenham street, cost $12,500.—The Board of Health have asked the City Engineer to recommend the laying of sewers on several streets.—Building permits have been granted to William Brown for brick dwelling on Superior street, cost $1,250, and H. Oldham, brick dwelling on William street, cost $3,500.

WINNIPEG, MAN.—G. E. Teeter, architect, 536½ Main street, has taken tenders for the erection of a brick residence in Oakwood ave., Riverview, fo William Bell.—H. F. Hutchings wil

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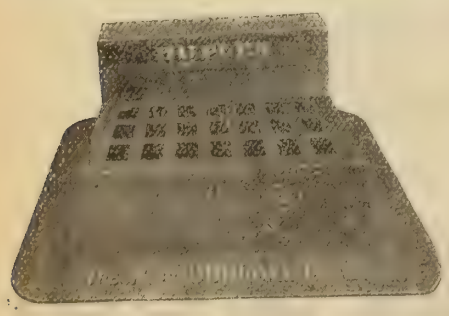

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erect a residence corner of Park road and Wellington crescent, cost $30,000.—The Bemis Bag Co. will erect a building corner Alexander avenue and Stanley street.—C. J. Brown, City Clerk, will receive tenders up to April 26th for erection of a quarantine hospital. Plans at office of C. H. Wheeler, architect.—J. H. G. Russell, architect, has taken tenders for erection of a brick residence on Nassau street for G. H. West.—Darling & Pearson, architects, have taken tenders for the erection of a Nurses' Home for the General Hospital.—Plans are being prepared for the Grain Exchange building, cost $250,000.—The Elks Club propose to erect a villa at Winnipeg beach.

TORONTO, ONT.—F. H. Herbert, architect, will receive tenders up to 19th inst. for remodelling store building at 181 Yonge street for J. J. Follett.—The Board of Control will receive tenders up to April 19th for additions and alterations to the main pumping station, foot of John street.—D. Lorsch & Co. have sold a site on Dundas street to a manufacturing concern.—Wm. Davies has donated two sites for Baptist mission halls, one at corner Queen street and Reid ave. and one on Pape ave. near Queen street.—The Toronto Presbytery will build a church, corner Reid ave. and Gerrard street.—H. Tweedie will build three residences on Parkview ave.—F. T. Burgess intends erecting several six-roomed houses on Pape ave.—Love Bros. expect to build about 100 houses, chiefly in Riverdale.—The Board of Control have decided to appropriate $60,000 for a High school building and site in Riverdale.—James Bain, Public Librarian, has reported that the plans for the Yorkville ave. branch library are completed.—Plans have been completed for St. Peter's Roman Catholic church to be erected at corner of Bloor and Markham streets, brick and stone, cost $27,000.—City Engineer Rust has recommended the construction of the

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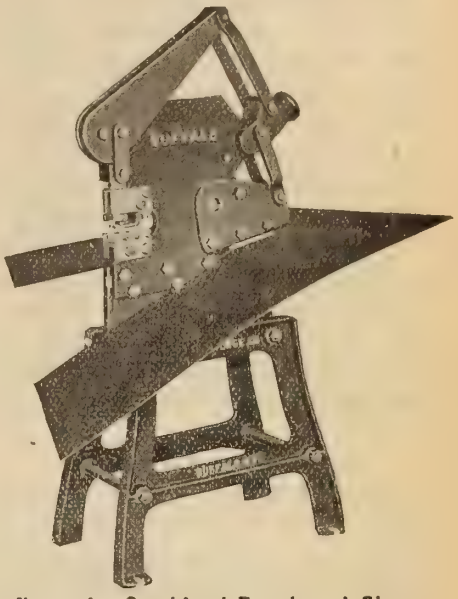

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following: Asphalt pavements — Taylor street, from Sumach to River, $2,602; Laxton ave., from Jameson to Dowling, $3,117; Simcoe street, from King to Wellington, $5,589; St. Vincent, from Grenville to St. Joseph, $9,292. Bitulithic pavements — Howie ave., from Clark street to north end, $3,019; Concord ave., from south side of Northumberland street to a point 712 feet north, $5,900. Resurfacing macadam roadway—Beverley street, $7,072; Queen's Park Crescent, $8,907. — John Hallam will receive tenders up to 6 p.m. of April 18th for addition to warehouse at 111 Front street east.—Tenders have been called for erection of three houses on Bartlett avenue. Plans at 76 Montrose avenue.—The congregation of Crawford street Methodist church have decided to build a new Sunday School building, cost $20,000.—The congregation of St. Mary Magdalene's are discussing the extension of their church building to Manning avenue, cost $18,000.

CONTRACTS AWARDED.

NANTON, ALTA.—Building of school house: Brown & Davis, contractors, at $8,020.

BRIDGEPORT, ONT.—Erection of bridge: Hamilton Bridge Works, at $18,000.

FORT WILLIAM, ONT.—Building of new church and Sunday school: Russel Bros., contractors.

WELLAND, ONT. — Houses for the Cordage Company: Gallivan Building Company, contractors.

VANKLEEK HILL, ONT. — $4,218 5 per cent. debentures: G. A. Stimson & Co., Toronto, purchasers.

FRANK, ALTA.—Construction of tipple for Canadian American Company: Frayer & Sinclair, contractors.

EAST TORONTO, ONT.—$32,500 school debentures: Canadian Securities Company, purchasers, at $32,250.

RENFREW, ONT.—$27,439 town debentures: Wood, Gundy & Company, Toronto, purchasers, at $26,616.

PORTAGE LA PRAIRIE, MAN.—Mr. Stewart has secured a five mile sub-contract on the Midland Railway.

BRANDON, MAN.—Addition to Brandon College: McDougall & Ireland, Virden, Man., successful tenderers, at $30,000 exclusive of heating and plumbing.

PETERBORO, ONT. — A double dwelling on Rubidge street for George Benson and a brick residence on Park street for Joseph Johnson: W.J. Johnson, contractor.

BARRIE, ONT.—Public school building at Allandale: Entire building except heating system, Ball Planing Mill Co., $17,074; heating, Pease Foundry Co., Toronto, $2,275.

EDMONTON, ALTA.—Warehouse on First street for Revillion Freres: Cannell & Spencer, contractors.—Post office building, corner Rice and McDougall streets: K. McLeod, contractor, $7,000.

ST. CATHARINES, ONT.—Extension of Niagara, St. Catharines & Toronto Railway: Construction work, Joseph Battle, of Thorold, successful tenderer; permanent bridges, Canada Foundry Co.

DARTMOUTH, N. S.—William Stair, Son & Morrow have been given the contract for supplying pipe for the north end extension and new main as follows: T. & B., 16 inch at $31.09 a ton, 10 inch at $32.50 and 6 inch at $34.15.

TORONTO, ONT. — Residence on Poplar Plains Road for J.K. McMaster: Brick work, Elgie & Page; carpenter work, Dinnis & Son. Bond & Smith, architects.—Residence for Eugene Coste on Poplar Plains Road: Brick work, Elgie & Page; carpenter work, Scholey Bros. Bond & Smith, architects.

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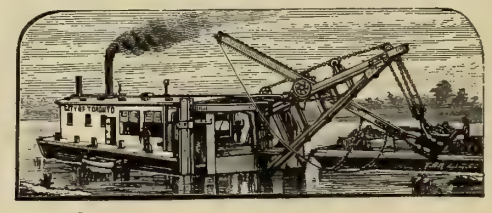

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WINNIPEG, MAN. — A. B. Ormsby, Limited, have secured the contract for fire-proof windows for the MacIntyre block, the new Hudson Bay store and the new warehouse for Grosse & Walker.—C.S. Bridgman, architect, has let the contract for construction of three-story apartment house, corner Logan and Martha streets, cost $35,000.

COLLINGWOOD, ONT.—Woolner & Herrington, contractors, will build the following; Two story brick house on Hume street for Charles Tymon, cost $2,100; two storey brick house on Fourth street for M. Brown, cost $1,800; two story house on Oak street for W. McLean, cost $1,200; two story brick house on Simcoe street for W. Travis, cost $1,500; two story brick house on St. Marie street for W. J. Woolner, cost $1,200.

OTTAWA, ONT. — Construction of National Transcontinental Railway: Quebec to La Tuque, 150 miles, Hogan & Macdonald, contractors, at $5,296,000; Winnipeg to Superior Junction, 245 miles, J. D. McArthur, contractor, at $13,010,000; steel viaduct over Cap Rouge valley, Dominion Bridge Company, at $318,000. Other tenders were as follows: Quebec to La Tuque—O'Brien & Mullarkey, $5,550,000; Grand Trunk Pacific, $6,459,000; M.P. Davis and J.T. Davis, $6,667,000; M. Connolly, Desjardins & Wilson, $7,081,000; MacArthur Construction Company, $7,040,000. Winnipeg to Superior Junction—Pacific Construction Company, $13,028,000; Grand Trunk Pacific, $13,991,000; MacArthur Construction Company, $17,048,000. Steel viaduct—Grand Trunk Pacific, $347,000; Phoenix Bridge Company, $348,000; Locomotive & Machine Company of Montreal, $331,000; Canadian Bridge Company, $343,000.

NEW COMPANIES.

Silverland Development Company, Toronto, incorporated, capital $1,000,000, to carry on mining operations. Directors, E.J.H. Pauley, E.R. Clarkson, and others.

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(Continued on page 12.)

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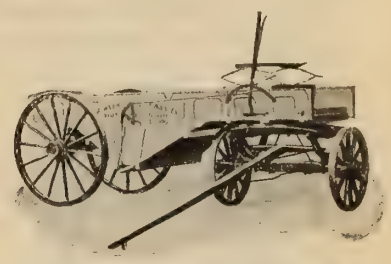

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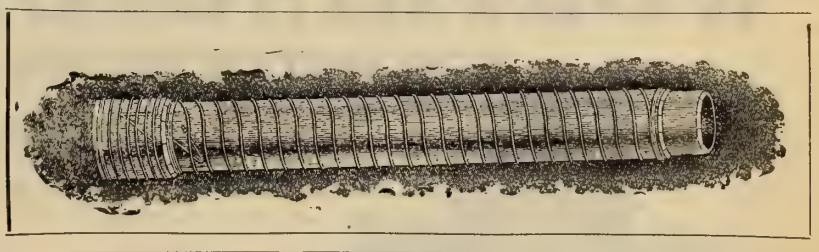

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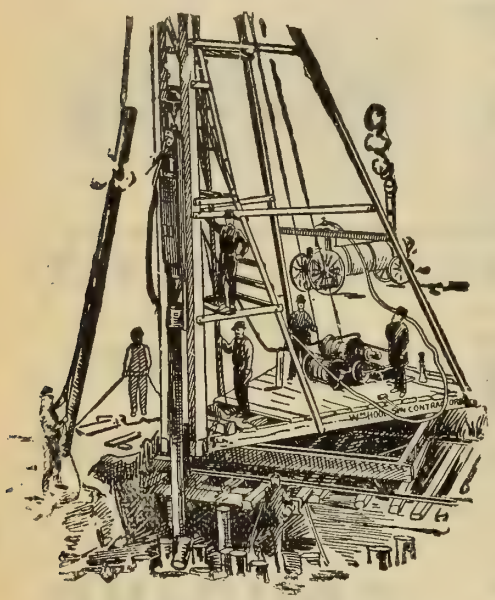

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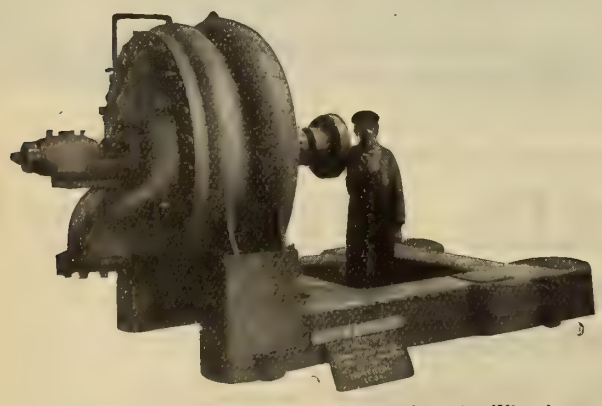

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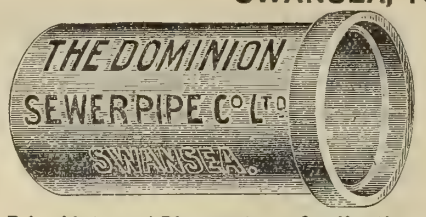

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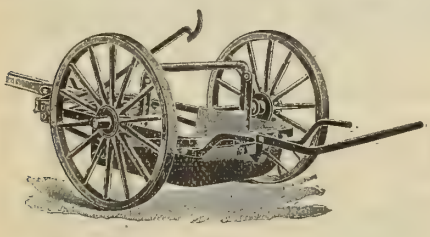

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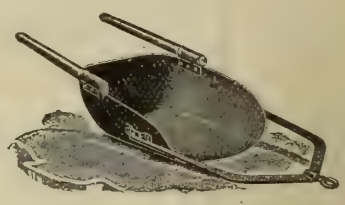

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							Neat.					3 (Sand) to 1 (Cement)				
					Initial	Final	1 dy.	7 dys.	28 dys.	3 mos.	1 yr.	1 dy.	7 dys.	28 dys.	3 mos.	1 yr.
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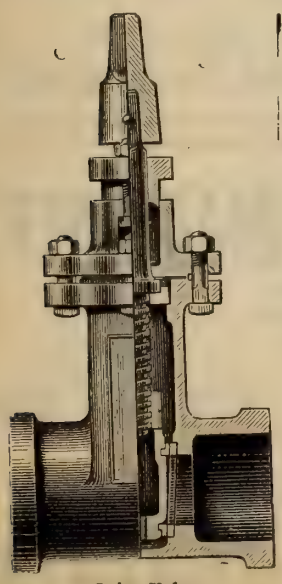

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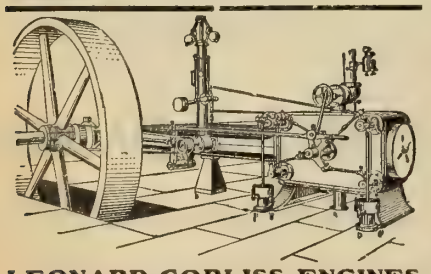

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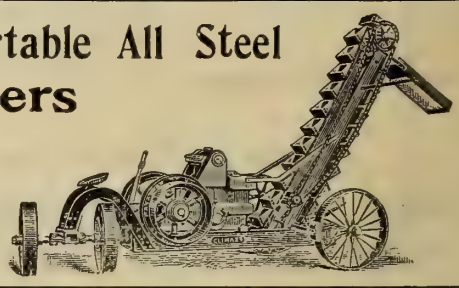

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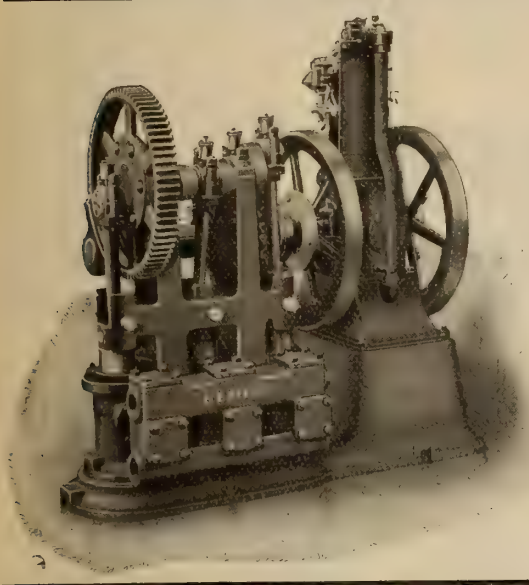

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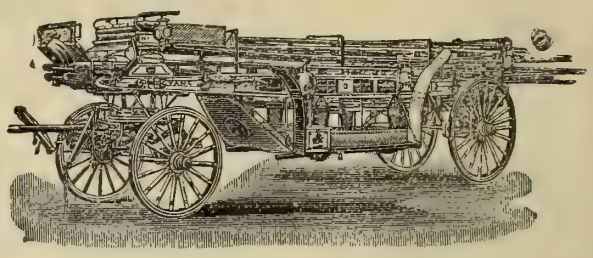

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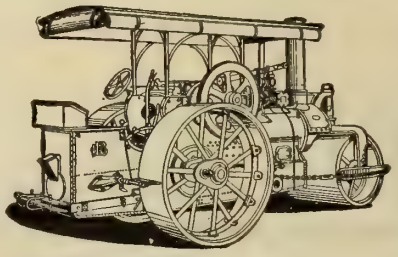

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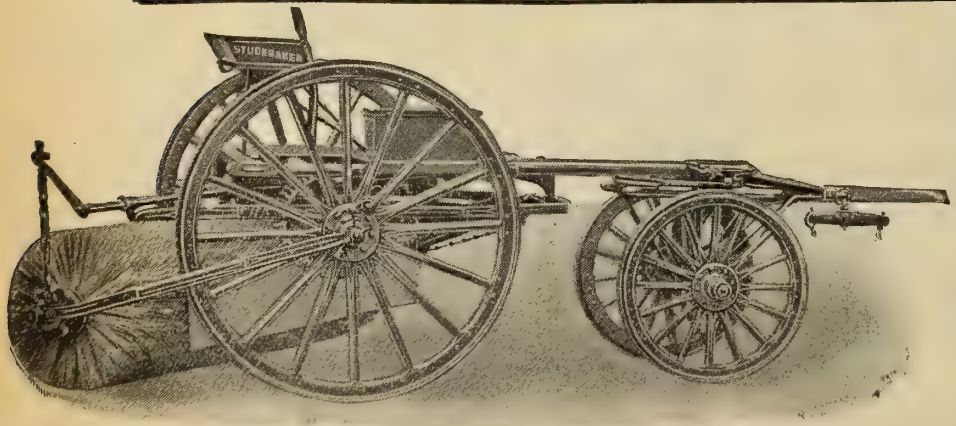

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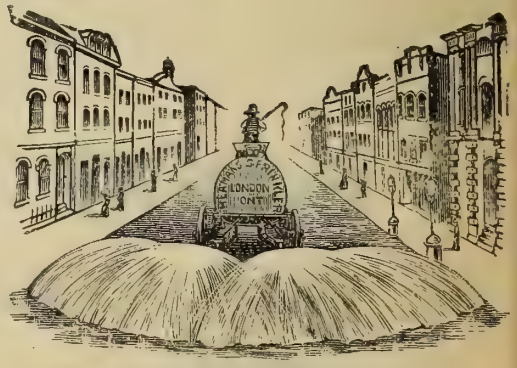

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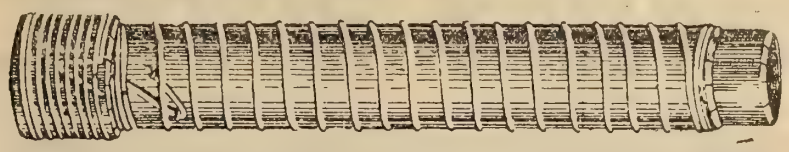

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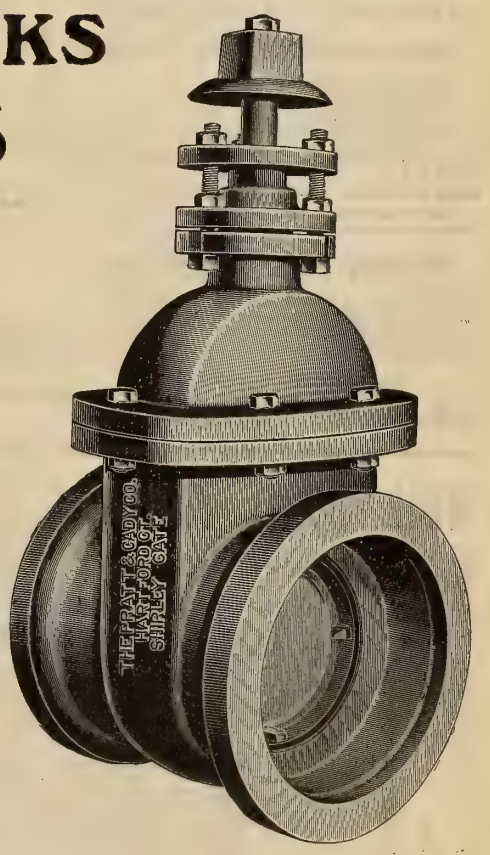

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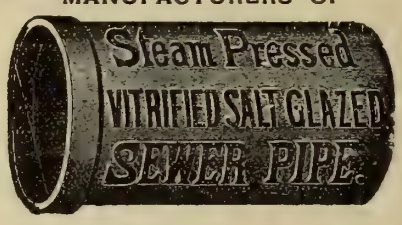

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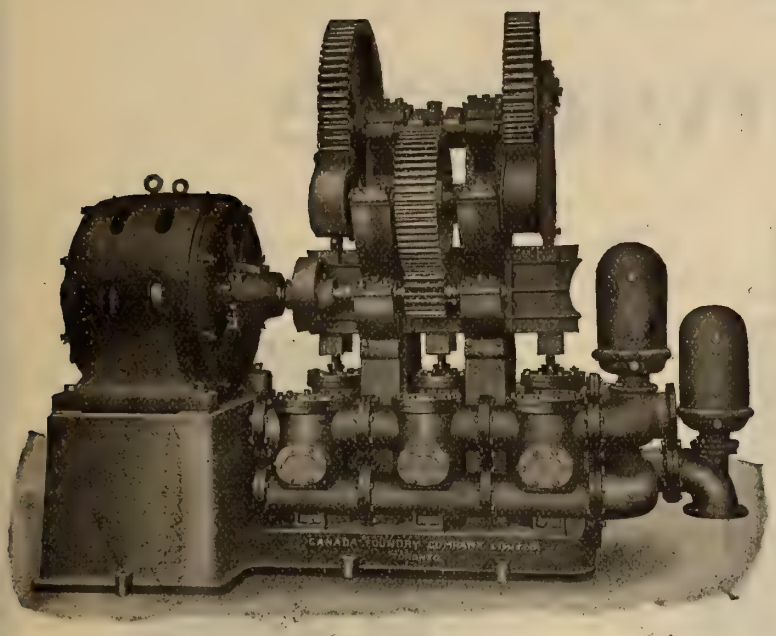

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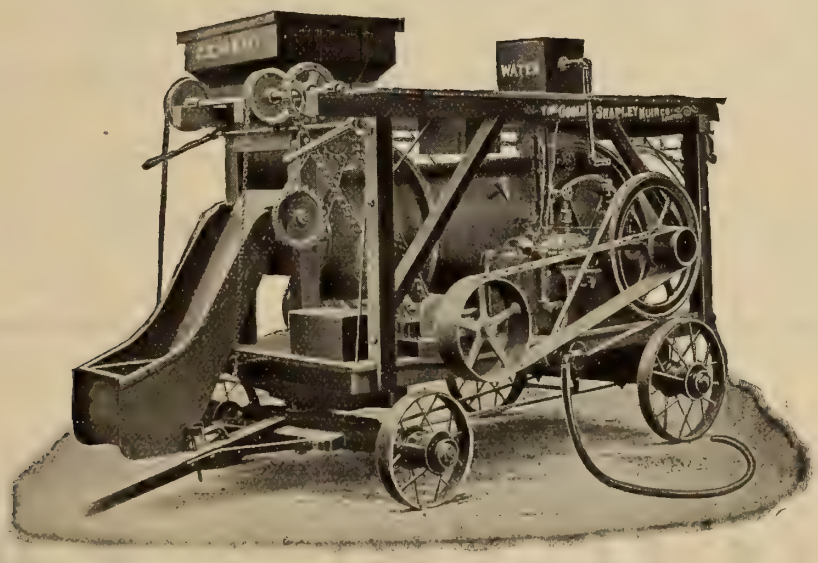
Ideal Automatic Concrete Mixers

The Only Successful Automatic Mixer Made



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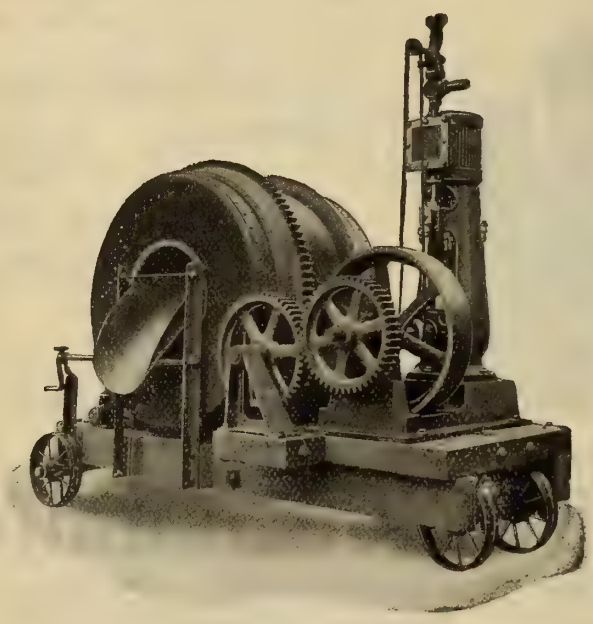
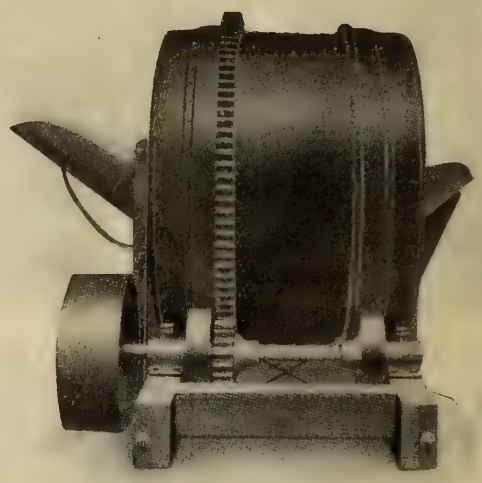


Note Heavy Gears.



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CANADIAN

Contract Record

A Weekly Journal of Public Works, Tenders, Advance Information and Municipal Progress

This Paper Reaches Every Week the Town and City Clerks, Town and City Engineers, County Clerks and County Engineers, Purchasers of Municipal Debentures and Leading Contractors In All Lines Throughout Canada

VOL. 17. TORONTO, MONTREAL — APRIL 25, 1906 — WINNIPEG, VANCOUVER No. 8

THE CANADIAN CONTRACT RECORD
PUBLISHED EVERY WEDNESDAY

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TO SURVEYORS

Young man would like to join surveying party. Address "SURVEY," care CONTRACT RECORD, Toronto.

Debentures for Sale

Sealed tenders will be received up to noon of SATURDAY, APRIL 28TH, 1906, for the purchase of $4,700 High School Debentures of the Town of Oshawa, dated April 2nd, 1906, bearing interest at 4½ per cent. per annum and repayable at the office of the Treasurer, Oshawa, in 20 equal annual instalments of principal and interest. The highest or any tender not necessarily accepted.

THOS. MORRIS,
Town Clerk.

TENDERS
for
SUPERSTRUCTURE FOR STEEL BRIDGE
ETC.

Proposals will be received by the undersigned up till noon on MONDAY, THE 7TH DAY OF MAY, 1906, for the erection of a steel rivetted truss bridge, 120 feet clear span, 16 feet clear roadway, to carry a 6 inch concrete floor and a live load of 100 lbs. per square foot. The bridge to be erected over the River Canard between the Townships of Anderdon and Sandwich West, in the County of Essex, 6 miles from Amherstburg.

JOHN F. MILLEN,
County Clerk of Essex,
Sandwich, Ont.
Sandwich, April 14th, 1906.

TENDERS

will be received by the undersigned until WEDNESDAY, MAY 2ND, for the erection of an R. C. Church in Broadway Ave., Eglinton, Ont. Lowest or any tender not necessarily accepted.

J. P. HYNES, Architect,
32 Adelaide St. E., Toronto.

Cast-Iron Pipe

Sealed bids or tenders will be received by the Town of St. Stephen until eight o'clock, p.m., of THURSDAY, THE TENTH DAY OF MAY, 1906, for furnishing approximately one thousand (1,000) tons of 10" and 14" cast-iron pipe and special castings.

Specifications may be seen at the office of the Town Clerk, St. Stephen, N. B., or at the office of the CANADIAN CONTRACT RECORD, Montreal.

All bids must be accompanied by a certified check for Five Hundred Dollars ($500.00), and security in the amount of Five Thousand Dollars ($5,000.00) will be required for the faithful performance of the contract.

The Town reserves the right to reject any or all bids.

J. VROOM,
Town Clerk.
St. Stephen, N. B., April 16, 1906.

TENDERS

Sealed tenders, marked "Tenders for Sidewalks," will be received by R. M. Thompson, Acting Clerk of the Town of Blenheim, up to 7 o'clock p.m. on MONDAY, APRIL 30TH, 1906, for the construction of certain Cement Sidewalks and Crossings in the Town of Blenheim.

The said work to be constructed according to the plans and specifications of Geo. A. McCubbin, Esq., Town Engineer, which may be seen at the Clerk's office on and after this date.

A detailed list of the work to be done can be obtained from the Acting Town Clerk.

As security for the work the Council will retain fifteen per cent. of the contract price for the space of five years, allowing bank interest thereon.

T. K. MORRIS,
Chairman Board of Works, Blenheim,
Blenheim, April 10th, 1906.

TOWN OF PERTH
TENDERS

Sealed tenders will be received until six (6) p. m., MONDAY, APRIL 30, 1906, for the furnish- of all materials and labor, for the construction of all concrete sidewalks and crossings in the Town of Perth, that the Municipal Council of the Town of Perth may desire to construct during 1906.

Tenders to be addressed to John A. Kerr, Town Clerk, Town of Perth, Ont.

An accepted cheque for $200.00 must accompany each tender.

The lowest or any tender not necessarily accepted.

For forms of tender, specifications and all other information apply to

HARRY WELCH, Town Engineer,
Box 255, Perth, Ont.

TENDERS

separate or in bulk, will be received by the undersigned up to noon of SATURDAY, 5TH MAY, for the trades required in the erection of a Physics Laboratory in Queen's Park for the University of Toronto.

Plans and specifications may be seen and all information obtained on application to

DARLING & PEARSON, Architects,
2 Leader Lane, Toronto.

The lowest or any tender not necessarily accepted.

To Paving Contractors

Sealed tenders, addressed to the Chairman of the Committee on Works, will be received by the City Clerk, St. Catharines, Ont., until 12 o'clock noon, on MONDAY, 30TH INST., for about 16,000 square yards of paving with vitrified brick upon concrete foundation and about 2,500 lineal feet of 5" stone curbing on St. Paul Street, in the said city.

Plans and specifications may be seen and form of tender obtained at the office of the City Engineer on and after the 20th inst.

The lowest or any tender not necessarily accepted

R. E. SPEAKMAN,
City Engineer,
April 10, 1906. St. Catharines, Ont.

TOWN OF WALKERVILLE
Tenders for
GRANOLITHIC SIDEWALKS

Sealed tenders will be received by registered post, addressed to the undersigned, up to noon on

Monday, the 7th day of May, 1906,

for the construction of Granolithic Walks 4 feet wide on the following streets, viz.: 7704 sq. ft. on both sides of Windermere road, south of Wyandotte; 7578 sq. ft. on both sides of Victoria road, south of Wyandotte; 5080 sq. ft. on south side of Tuscorora street, from Walker road to Victoria road; 1248 sq. ft. on east side of Argyle road, between Tuscorora and Cataraqui streets; 1488 sq. ft. on east side Monmouth road, between Niagara and Erie streets; 716 sq. ft. south side Cataraqui street, from Victoria road to Devonshire road; 672 sq. ft. on Walker road, from Wyandotte street to railway tracks, all in the Town of Walkerville.

The work to be completed by the First day of July, 1906.

Plans and specifications may be seen on application to Mr. Owen McKay, C.E., Walkerville.

Tenders must be accompanied by a marked cheque made payable to the Town Treasurer, equal to 5 per cent. of the amount thereof.

Should any party whose tender is accepted, or his sureties, fail to execute the necessary contract and bond for the due fulfilment of the same, his deposit will be forfeited to the Town.

Deposits of unsuccessful tenderers will be returned.

The lowest or any tender not necessarily accepted.

The names of two responsible persons willing to act as sureties must accompany each tender.

CECIL H. ROBINSON,
Town Clerk.
Walkerville, April 25, 1906.

[FOR ADDITIONAL ADVERTISEMENTS FOR TENDERS SEE NEXT PAGE.]

TENDERS

will be received until 5 p.m. on WEDNESDAY, MAY 2ND, for the erection of a pair of Houses in the north-east part of the city.

GORDON & HELLIWELL, Architects,
Confederation Life Building, Toronto.

Sealed Tenders

Sealed bids will be received by the undersigned up to 10 a.m on FRIDAY, APRIL 27TH, for the Taking Down and Removal of the buildings at the North-East corner of Bloor and Yonge Streets.

Specifications may be seen at the office of

F. S. BAKER, Architect,
Mail Building, Toronto.

Debentures For Sale

Tenders will be received up to the 14TH DAY OF MAY, 1906, by the undersigned, for the purchase of $4,000 00 worth of Debentures of the Township of Hullett, payable in twenty annual instalments, interest at 4 per cent. Particulars will be furnished on application to the undersigned.

JAMES CAMPBELL,
Clerk of Hullett Township,
Londesboro P. O.

TENDERS

whole or separate, will be received by the undersigned up to noon of MONDAY, 7TH MAY, next for the several trades involved in the erection of a 3-storey Bank and Office Building in Orillia for R. R Slaven, Esq.

The lowest or any tender not necessarily accepted.

Plans and specifications may be seen at the office of the Architects,

CROKER & HOY,
Orillia, Ont.

CONTRACTS OPEN.

WINGHAM, ONT.—Steps are being taken to establish a hospital here.

HAGUE, SASK. — The ratepayers have decided to build a new firehall.

TEESWATER, ONT.—A. Little will build a brick residence on Clinton street.

LUCKNOW, ONT.—J. G. Anderson will build two stores next the post office.

PRESTON, ONT.—St. John's church expects to build a new rectory this summer.

HAZLETON, B. C. — Compeau & Luduc will erect a saw mill here this year.

NEWMARKET, ONT.—H. Cane is having plans prepared for a new residence.

PERTH, ONT.—Hogg & Thompson will enlarge their furniture factory and warerooms.

HULL, QUE.—The Council will be petitioned to have Main street paved with asphalt.

ORILLIA, ONT.—A by-law has been passed to raise $45,000 to build a new concrete dam.

FLESHERTON, ONT.—Plans are being prepared for the new hotel for the Flesherton Hotel Co.

KINCARDINE, ONT.—A by-law is to be voted on May 7th to raise $7,000 for sewer construction.

COLLINGWOOD, ONT.—Mr. McKewan intends building a house on Sault Ste. Marie street.

ALLISTON, ONT.—A by-law will be voted on May 14th to raise $7,000 for construction of sewers.

MIDLAND, ONT. — Capt. David Burke will build a large residence corner Queen and Victoria streets.

RED DEER, ALTA.—A by-law has been carried to issue $35,000 debentures to erect a new school building.

BERLIN, ONT.—A four-storey addition, 56 x 85 feet, will be built to St. Jerome's College, cost $60,000.

VERNON, B. C.—The Trustee Board of the Methodist church have decided to build an addition to their church.

MOOSE JAW, SASK. — Building permits for residences have been granted to W. J. Lawrence and W. J. Haviland.

ST. FRANCIS XAVIER, MAN.—P. Lavallee will receive tenders up to May 1st for construction of three pile bridges.

GUELPH, ONT.—A deputation will seek aid from the Dominion Government to erect a new building for the Fat Stock Club.

PRINCE ALBERT, SASK. — The members of Kinistino Lodge, A. F. & A. M., are considering the erection of a new block.

CAMPBELLTON, N.B. — The congregation of Christ's church are considering the erection of a new church building.

EMERSON, MAN. — W. W. Unsworth will receive tenders up to April 26th for erection of a four-roomed school building.

SPRUCE GROVE, MAN. — H. Magoon, architect, Edmonton, has prepared plans for a new German Lutheran church.

VEGREVILLE, ALTA.—H. Magoon, architect, Edmonton, has prepared plans for a hotel for McAllister & Son, cost $15,000.

SYDNEY MINES, N. S.—A.C. McDonald, Town Clerk, will receive tenders up to May 11th for the erection of a new town building.

STONEWALL, MAN. — The Bank of Hamilton have purchased a site on Main street on which they will build a bank building.

DEER PARK, ONT.—A. A. Macdonald, T. Eyck, Mr. Whiteman and Mr. Edwards will each erect residences on St. Clair avenue.

ST. THOMAS, ONT.—The Home Bank of Canada have secured a building on Talbot street which will be remodelled for bank purposes.

PINCHER CREEK, ALTA.—Lawson & O'Gara, architects, Calgary, have taken tenders for the erection of a stone bank building here.

PORTAGE LA PRAIRIE, MAN.—The C. N. R. will build a swing bridge across the White Mud river on its Oakland extension.

WOODSTOCK, ONT. — F. Wilson will build a residence on Francis street and J. Moulton a brick residence corner Canterbury and Thames streets.

ST. CATHARINES, ONT. — The recommendation of the committee for the laying of asphalt block pavement on Church street was adopted by the Council.

CARMAN, MAN.—The Council will submit a by-law to the ratepayers to raise $58,000 for electric light plant, waterworks, sewer system and fire protection.

INGERSOLL, ONT.—W. Mills will build a house on Boles street —F. Wilson will build a house on Francis street.—T. W. Nagle will erect a residence on King street west.

ROSTHERN, SASK.—Willis Chipman, C. E., Toronto, has reported on the installation of fire protection, electric lighting and telephone systems, at a total cost of $30,000.

TILBURY, ONT. — A. M. Piper, architect, Chatham, will receive tenders up to April 25th for erection of a brick residence for J. Foster and a brick block for H. Beuglet.

CARLETON PLACE, ONT.—Zion church congregation are soliciting subscriptions for improvements to their church, cost $10,000.—The Town Council will construct a number of concrete sidewalks.

ABERFOYLE, ONT.—Tenders will be received by the Committee of Council up to April 28th for construction of two cement concrete abutments for bridge on the Speed river.

LONDON, ONT.—It is understood that the C. P. R. will build a forty foot addition to the station.—The new canning firm which is locating here will begin building at once.

MARKHAM, ONT. — G. Robinson will receive tenders up to May 3rd for restoration of public school building here. Plans with J. Thomas and W. R. Mead, architect, Norway.

GRAND FORKS, B. C.—In connection with the building of the Kettle Valley Railway, a bridge will be built costing about $30,000. Passenger and freight depots will also be erected.

GRENFELL, SASK.—Tenders will be received by J. W. Jones up to May 2nd for erection of a brick veneer church. Plans with above named and with W. M. Dodd, architect, Regina.

PARRY SOUND, ONT. — H. Y. Complin and J. G. Johnstone intend building residences on Belvidere avenue this summer.—H. J. Mantell will enlarge the house of the W. Peter Estate.

STRATHCONA, ALTA. — The by-law has been passed to issue $35,000 electric light debentures.—H. Magoon, architect, Edmonton, has prepared plans for a residence for E. McDougall.

ST. STEPHEN, N. B.—J. Vroom, Town Clerk, will receive tenders up to May 10th for cast iron pipe and special castings. Plans at his office and at office of CANADIAN CONTRACT RECORD, Montreal.

WELLAND, ONT.—Deitrick & Kennedy, architects, will prepare plans for a block on East Main street for A. D. White. Same architects are preparing plans for residence on Division street for B. Lundy.

FORT WILLIAM, ONT.—J.C. Stinson, architect, has taken tenders for the erection of a residence for Dr. Mitchell. —Tenders have been taken by J. C. Stinson, architect, for erection of store and dwelling for L. L. Petier.

ST. JOHN, N. B.—F. N. Brodie, architect, has taken tenders for erection of a stone branch bank building for the Bank of New Brunswick.—Mr. Swayne, gas expert, has recommended improvement to the gas plant costing $8,000.

REGINA, SASK.—J. H. Haslam will build a residence here, cost $30,000.—The City Council will have plans prepared for a new fire hall building, cost $18,000. They have also decided to construct sidewalks to cost $49,800.

SASKATOON, SASK.—The Board of Management of Knox church will build a vestry at the rear of their church building.—The Gillespie Clothing Co. purpose enlarging their store building.—Mrs. G. H. Fletcher expects to build a residence in Nutana this summer.

PETROLIA, ONT.—H. Branston, Secretary School Board, will receive tenders up to May 9th for erection of a concrete stone and brick building, with heating, ventilation, plumbing and seating. Plans with above named and with Wilson & Sons, architects, Chatham.

SAULT STE. MARIE, ONT.—L. K. Jones, Secretary Department of Railways and Canals, Ottawa, will receive tenders up to April 30th for deepening and widening entrance to canal. Plans at office of Chief Engineer, Department of Railways and Canals, Ottawa, and with engineer in charge at this town.

EAST TORONTO ONT.—Mr McEachren, Lee ave., will build two houses

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on Hambly avenue.—C. F. Wagner, architect, has called for tenders for a store on Queen street for W. J. Snell, cost $5,000.—Mr. Coleman will build four houses on Hambly avenue.—J. H. Curran will also build on same street.

PORT ARTHUR, ONT.—The plans of H. Simpson, architect, Toronto, for two public school buildings here have been accepted by the Board.—T. Hanley, architect, has taken tenders for erection of a residence for H. Finger.—Plans are being prepared for a new office block, corner Cumberland and Lincoln streets, for G. Mooring.

BRANTFORD, ONT.—J. Nicholson will erect a brick dwelling on Erie ave., cost $1,800.—P. H. Secord will erect a brick dwelling on Victoria street, cost $1,350.—Some Hamilton and local capitalists are seeking a site on Colborne street for a new theatre.—The G. T. R. will soon build a large round house here.

FREDERICTON, N. B.—C. H. La Billois, Department of Public Works, will receive tenders up to May 7th for building masonry sub-structure and approaches of Grave Yard Bridge in Albert County, N. B. Plans with above named and with E. Lynds, Hopewell Cape; D. W. Stewart, Riverside; C. J. Osam, Hillsboro and J. Ryan, Moncton.

HAMILTON, ONT.—S. B. Cunningham, manager of the Hamilton Brewing Association, will build a residence corner of Ray and King streets.—G. W. Robinson has recently purchased a business property which he will have enlarged into a large store building.—St. Patrick's church will build a new presbytery, corner of main street and Victoria avenue.

PETERBORO, ONT.—W.G. Morrow, Secretary Board of Education, will receive tenders up to April 30th for erection of public school building. Plans with W. Blackwell architect.—The plans of J. Belcher, architect, for the County House of Refuge, will be accepted subject to some alterations. It will be three-storey, brick, 75 x 40 feet.

CHATHAM, ONT.—Building permits have been granted to A. Byram for brick dwelling on Park street, cost $3,100, and to G. A. Everitt for dwelling on Park street.—The Medical Health Board have an option on a site for the proposed Isolation hospital.—Tenders will be received up to April 28th by W. N. Morley for heating and ventilating the McKeough school.

EDMONTON, ALTA.—The D. R. Fraser Company are preparing to erect a large office building, corner of Nanaimo and Rice streets.—H. Magoon has prepared plans for the following: Residence for Peter Butchard, cost $15,000; business block on Jasper avenue for A. Christall, cost $15,000; German Lutheran church, corner Pickard and Kinistino streets; residence for O. Bush on McKay street; residence for Dr. McCauley on Eighth street; residence on Eighth street for A. W. Ormsby, and residence for Wm. Campbell, cost $3,500.

KINGSTON, ONT.—Col. Wetherbee, architect of the Militia Department, has been in the city in connection with the improvements to the Military barracks.—A by-law will be voted on for improvement of city buildings and registry office, cost $6,000.—It is said that a site has been purchased in Barriefield on which a fine club building will be erected.

TORONTO JUNCTION, ONT.—The following building permits have been granted: Irving Wood, a two-storey brick dwelling on Willoughby avenue, $2,000; J. Denbeigh & Son, six two-storey brick dwellings on Louisa street, $1,800 each; J. A. Hawson, a two-storey brick house on Clendenan avenue, $3,000; S. E. Drewitt, a two-storey brick dwelling on Victoria street, $1,900; D. McGill, a two-storey brick house on Quebec avenue to cost about $1,800; J. Williams, a two-storey and attic brick house on Clendenan avenue, $1,800.

MONTREAL, QUE.—The Sisters of the Congregation of Notre Dame will erect a three-storey stone and brick school building on Dufresne street, cost $20,000.—Dr. J. S. Girard will build a residence on Dorchester street, cost $7,000.—W. A. Desbarats will erect a five-storey building, corner Beaver Hall Hill and Lagauchetiere streets, cost $50,000.—The Market Committee wish to build a shelter at Bonsecours Market, cost $15,000. They also wish to improve the Eastern cattle market, at cost of $60,000. — The Roman Catholic School Commissioners will build a boys' school on Fullam street, cost $45,000.—W. Theley will build an apartment house on Oxenden avenue, cost $20,000.

VANCOUVER, B. C.—Mark Fisher Sons & Co., woollen merchants, Montreal, will build a warehouse on Cordova street this spring.—The Liberal club are soliciting subscriptions for building club rooms, cost $20.000.—The Board of Works have decided to have asphalt pavement laid on Georgia street, cost over $60.000 and a block pavement on Pender street, cost $57,230.—The Gurney Foundry Co., of Toronto, have purchased a site adjoining the property of Dominic Burns for establishment of a branch business. — W. H. Armstrong will build a factory between Heatley and Carl avenue, for manufacture of vitrified brick.—An Alberta syndicate have purchased a site near Dunleevy avenue on which a large industrial house will be built.

STRATFORD, ONT. — Engineer Parsons has prepared plans for proposed subway for Nelson street.—The following building permits have been issued: D. and F. Smith, brick veneer on Erie street, brick residence on Worsley street two brick residences on Albert street; John McCaffery, two brick houses on Queen street; Fred Kuch, brick veneer house on Water street; D. Nichol, brick veneer house on Hibernia street; Joseph H. Beaumont, brick veneer house on Birmingham street; John Davis, two brick veneer houses on Queen street; Edgar Stone, residence on William street; H. T. Cook, residence on Caledonia street; George E. Kalbfleisch, residence on Gore street; D. W. Brown, residence on Railway avenue; W. H. Schenck, brick veneer reeidence on Water street; Chris. Meihm, residence on Romeo street; Dr. E. H. Eidt, brick veneer factory on Wellington street; D. McGregor, two residences on Brunswick street.

WINNIPEG, MAN.—James Follis is having plans prepared for a four story hotel, corner Main street and Henry avenue.—M. Romesblat, 651 Main street, will erect a five story brick and stone building this summer.—V. W. Horwood, architect, has taken tenders for erection of a residence corner of Edmonton and Assiniboine avenues for C. S. Riley.—J. H. Cadham, architect, has taken tenders for erection of a six story factory on Lombard avenue for the Kemp Manufacturing Co.—J.H.G. Russell, architect, has taken tenders for erection of a brick and stone warehouse for Porter & Co.—A site has been purchased, corner Arlington and Notre Dame avenues, for a new Roman Catholic church building.—The School Board have passed a by-law for the issue of $200,000 debentures for school sites and buildings.—D. Smith, architect, is preparing plans for the foundation of a new elevator for the Canada Paint Co. He has prepared plans for extensive additions to the residence of A. Dunlop at 350 Young street.—G. Brown, architect, has invited tenders for erection of a four story adddition to the Morris block on Main street.—McCormack & Ludlow will erect an apartment block on River avenue, Fort Rouge. — Bishop Serafin has had plans prepared for a new church to replace the present one, corner Derby street and Stella avenue.—The congregation of All Saints' church are considering the erection of a new building.—Sherwood & Kenrick, architects, have prepared plans for chancel to be added to St. John's church, cut stone and brick, 56 x 40 feet, cost $20,000.—Darling & Pearson, architects, will receive tenders up to April 28th for erection of a brick house on Roslyn place for F. W. Adams.—Blair & Northwood, architects, have taken tenders for erection of a seven story office and warehouse on Princess street for T. Ryan & Co., also for a house

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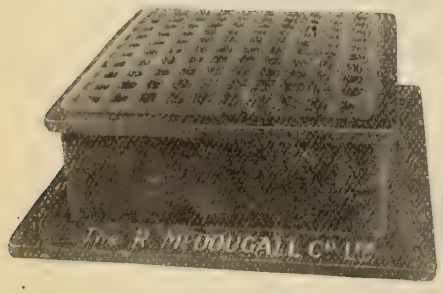

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on Assiniboine avenue for T. Ryan. Same architects have taken tenders for three story office and warehouse on Garry street for the Henderson Directories.—John Schroall has taken tenders for a residence on William avenue for F. Laudhan.—J. Chisolm, architect, has taken tenders for a residence on Kingsway, Fort Rouge.—V. H. Horwood, architect, has taken tenders for a brick house on Furby street.—Joseph Bernhart will erect a large hotel, corner Selkirk avenue and Main street.—J. Chisholm, architect, will receive tenders up to April 26th for erection of block on Lily street for J. Burridge.—H. R. Rugh, architect, will receive tenders up to 26th inst. for erection of a frame residence on Stradbrook place.—Hooper & Walker, architects, will receive tenders up to April 28th for erection of buildings on Mena street for A. S. Bardal.—C. J. Brown, City Clerk, will receive tenders up to April 30th for supply of from 30,000 to 40,000 barrels of cement.—Col. Ruttan, City Engineer, will consult with C. B. Smith, of Toronto, on plans for power plant at Pointe Du Bois Falls, on the Winnipeg river.—The Canadian Rubber Co. will enlarge their block on Princess street this summer.—Plans are being prepared for the buildings at the St. Charles race track, grand stand to be a steel structure. — The congregation of St. Paul's Presbyterian church will erect a new church building, corner of Pearl street and Notre Dame avenue. Stone, cost $60,000. V. W. Horwood, architect.—V. Barton, architect, has taken tenders for erection of stores and residences on Alexander avenue for A. J. Bloomfield.—Thirteen sets of plans have been received for the new Grain Exchange building. The proposed structure will be steel, seven stories, 127 x 129 ft.

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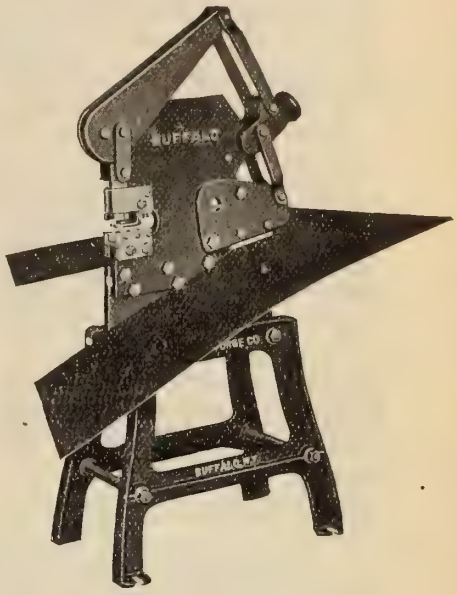

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following properties: Site on Shaw street to J. Dixon, photographer, for erection of residences; No. 214 Adelaide west to Thompson Engraving Co, which will undergo alterations; No. 11 Wellington west to Boyd, Brunell & Co., which will be altered; site corner of Elizabeth and Walton streets, to W. S. Rabonowitch, who will build two stores and dwellings. The Sterling Bank have leased from the same parties property at the corner of Adelaide and Simcoe streets, which will be altered for a bank building.—A. B. Stoud, architect, 803 Bathurst street, has invited tenders for construction of houses. —Plans are being prepared for an addition to Grace Hospital to cost $200,000. The plans of A. W. Holmes, architect, for St. Peter's R. C. church, corner Bloor and Markham streets, have been accepted, cost $25,000, Gothic style, brick and stone trimmings, 130 x 65 feet, work to begin at once.—The Board of the Haven and Prison Gate Mission are discussing plans for an addition to their building, to cost $9,000.—The Board of Control have decided to enlarge the freight shed at Harbor square, cost $23,300.—It is again reported that the G. T. R. wish to acquire the Government House property, corner of Simcoe and King streets, for a hotel site.—It is also reported that McMaster University are seeking a site on Bloor street for erection of a Medical school.—Tenders will be received at 292 Wellington street west for taking down old building and erection of two-storey brick structure, 40 x 60 feet.—A new church and parsonage will be erected on Sheridan ave., for the College st., Methodist church. —C.F. Wagner, architect, is taking tenders for a house on Broadview avenue for George White.—N. Alpaugh will receive tenders this week for erection of a three-storey brick store and residence, corner College and Grace streets.—H. Simpson, architect, has prepared plans for two school buildings at Port Arthur, which have been accepted.—Building permits have been issued as follows: Boyle & Markham, two 2-storey stone and brick dwellings, Walker ave., near Yonge street, cost $5,000; H. McGee, 1-storey brick lecture hall, 38 North street, cost 20,000; D. Chalmers, two 2-storey stone and brick dwellings, Lansdowne ave., near Bloor street, cost $3,800; J. E. McFadyen, 2½-storey brick and stone dwelling, Roxborough street west, near Yonge, cost $5,000; E. C. Tucket, 2-storey brick dwelling, Conduit street, cost $2,500; P. Warren, 2-storey stone and brick dwelling, Springhurst ave., cost $3,200; A. Burns, pair 2½-storey brick dwellings, St. Anne's road, cost $6,000; Hilton Bros., 2 storey and attic brick dwelling, 11 Gibson ave., cost $2,700; J. Matson, 2-storey stone and brick dwelling, 444 Gladstone ave., cost $2,300; J. Wythe, two 2½-storey brick and stone houses, Dundonald ave., near Yonge street, cost $8,000; Goodeham & Worts, 1-storey brick and stone cooper shop, Trinity street, cost $5,800; S. W. McKeown, 3-storey frame and iron tannery, 2 Matilda street, cost $4,000; W. H. Benson, four 2½-storey brick and stone dwellings, Beatrice street, cost $8,500; Holt & Devitt, pair 2-storey stone and brick dwellings, Crawford street, near Harrison, cost $6,000; J. Elliott, 2-storey brick store and dwelling, 1838 College street, cost $3,000; Rev. J. S. Colling, 2½-storey brick dwelling, College street, near Bathurst, cost $6,500; J. W. Beatty, 2½-storey brick and stone dwelling, Prince Arthur ave., near Bedford road, cost $6,000; W.B. Shuttleworth, four 2½-storey stone and brick dwellings, Rusholme road, cost $10,000, J. C. Boomer, pair 2½-storey brick dwellings, corner St. Annes street and Rusholme road, cost $5,400; L. Reid, pair 2-storey and attic brick and stone dwellings, Bloor street, near Hamburg ave., cost $6,000; New

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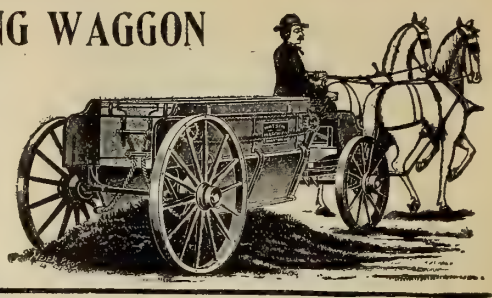

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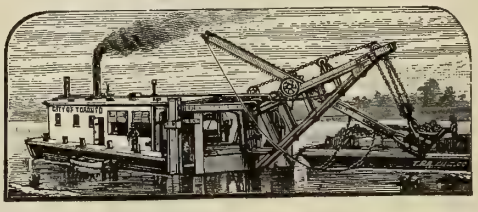

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HAMIOTA, MAN.—Building of new hotel: A. F. Nesbitt, contractor, cost $10,000.

KINGSTON, ONT.—Supply of Portland cement: Rathbun Co., at $1.86 per barrel.

QUEBEC, QUE.—2,000 feet of fire hose: Canadian Rubber Co., Montreal, 85 cents a foot.

BELLEVILLE, ONT. — Erection of House of Refuge: Walter Alford, contractor, $31,000.

KINGSVILLE, ONT. — Methodist church at California: D.H. McCay, contractor, cost $7,000.

PORT CREDIT, ONT.—Residence for Dr. Carveth on Lakeshore road: W. Skaife, contractor, $1,700.

FORT WILLIAM, ONT.—Residence on Bethune street for S,F. Flett: Waterworth & Kent, contractors.

MIDLAND, ONT.—Dredging at the Grand Trunk elevator: Owen Sound Dredging Co., contractors.

MOOSEJAW, SASK. — Two-roomed school building on South Hill: W.J. Lawrence, contractor, $7.300.

WEST SHEFFORD, QUE.—Installation of hydrants for fire protection: Louis Gauthier, contractor, $1,200.

LUCKNOW, ONT.—Block of stores for J. Joynt and A.T. Davidson: Jardine & Robertson, of Amberley, contractors.

STRATHCONA, ALTA. — Improvements to Strathcona House for Beauchamp & Chenier: Pheasey & Batson, successful tenderers, $8,224.

PORT ARTHUR, ONT.—Clearing of land at the Mission for the G. T. P. R.: Capt. Gibson, R. Beagle and T. Hogan, contractors, $72,000.

SOUTH ZORRA, ONT.—Two steel bridges for the township of East Zorra: Concrete floors, James A. Vance, New Hamburg, $1,400; concrete abutments, T. Cadham, Innerkip.

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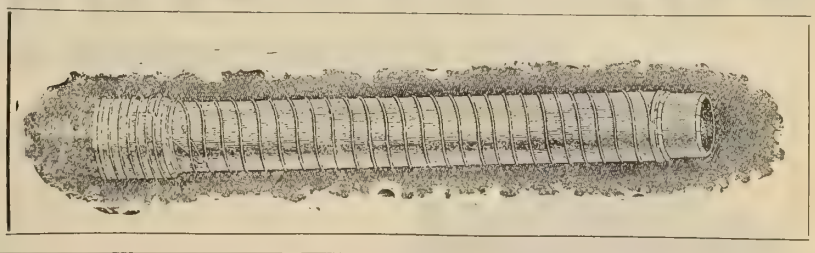

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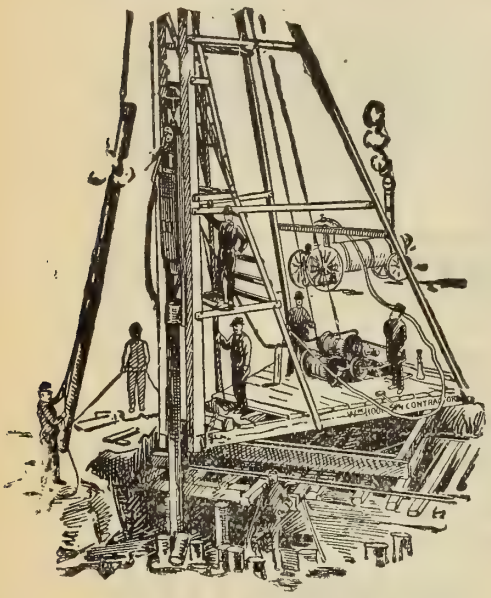

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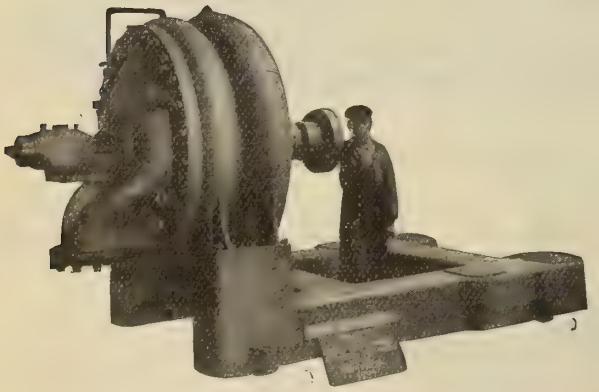

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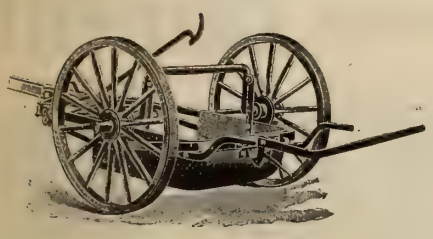

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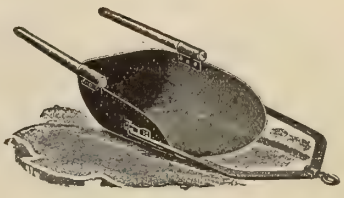

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							Neat.					3 (Sand) to 1 (Cement)				
					Initial	Final	1 dy.	7 dys.	28 dys.	3 mos	1 yr.	1 dy.	7 dys.	28 dys.	3 mos.	1 yr.
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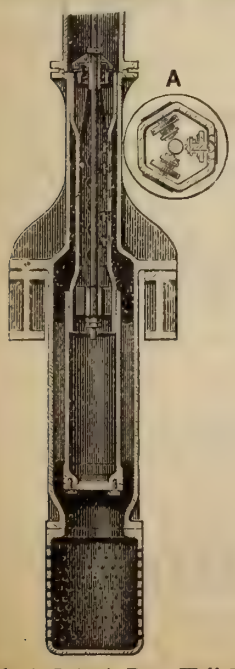

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SEAFORTH, ONT. — Guttridge & Edge, contractors, have secured the contract for building stations and other buildings on the C.P.R. line between Bolton and Parry Sound, cost about $100,000.

HALIFAX, N.S.—The Board of Works have recommended acceptance of the following tenders: Sand and gravel, J. Fredes; scrap iron, W. Fatridge; brick, Brookfield Bros.; cement, A.M. Bell & Co.

OTTAWA, ONT.—Erection of Stewarton Presbyterian church: J. & G. Lowe, contractors, cost $30,000. Architectural & Engineering Co., architects. — The Kerby Co., have secured the contract for furnishing sewer pipe at $1,500.80.

COBOURG, ONT. — Central School building: Masonry and brick work, Martin Jex & Co., $10,200; carpenter work, Henderson Bros., $9,997; painting, John Fetherstone, $850; plumbing and metal work, U.R. Dundas, $1,666

TORONTO, ONT.—Erection of new Press building at Exhibition Grounds: C. R.S. Dinnick, successful tenderer, $9,999. G.W. Gouinlock, architect.—The Board of Control awarded the following contracts for pavements: Wellington street, from Simcoe to Peter, asphalt, Barber Co., $12,806; Argyle street, from Dovercourt to Gladstone, City Engineer, $7,987.—Addition to main pumping station: Masonry, Self Bros., $7,600; carpenter work, A.B. Coleman, $1,690; galvanized iron, G.M. O'Brien, $419; structural steel work Dominion Bridge Co., $530.

WINNIPEG, MAN.—Warehouse on Market street for Marshall Wells Co.: Watterworth & Lee, contractors, $110,000. Hooper & Walker, architects.—Block on Portage avenue for J. M. A. Aikins: Reinforced concrete work, Hodgins & Thompson; structural frame work, C. A. P. Turner, of Minneapolis. J. Woodman, architect. — Block on Main street for A.M. Fraser: Grace Bros., confractors.—Grading of C.P.R. branch from Stoughton to Weyburn, Sask., forty miles: J.G. Hargrave Bros., contractors. —Three-storey stone, brick and steel block, corner of Logan and Martha streets, for D. Ripstein: Horner & Carter, contractors, cost about $65,000. C. Bridgeman, architect.—The Fire, Water & Light Committee have recommended the purchase of the Crossley gas producer, at a cost of $113,156, also the following tenders for meters: 150 half inch tridant disc meters, Neptune Meter Co., $10 each; 1,350 half inch Empire meters at $12.50 each, 50 one inch Empire meters at $25 each, and ten two inch Empire meters at $75 each, National Meter Co.; 50 ⅝ inch Lambert meters, Thompson Meter Co., at $9.90 each.

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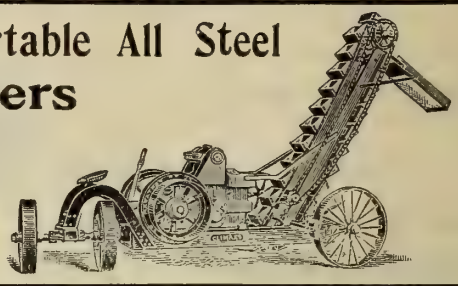
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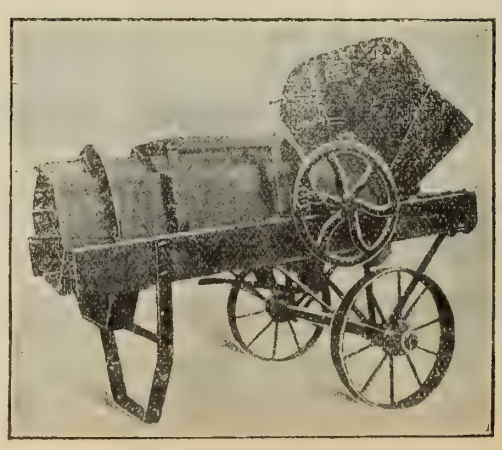
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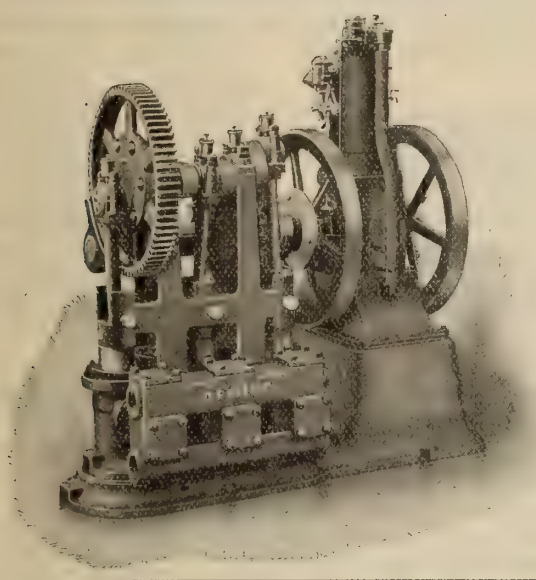

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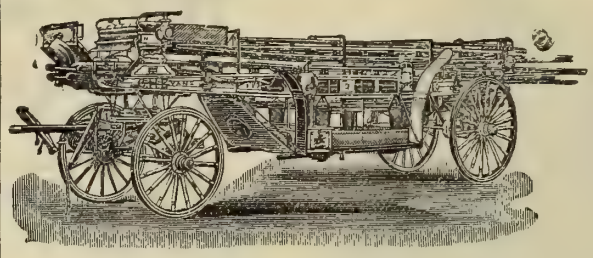

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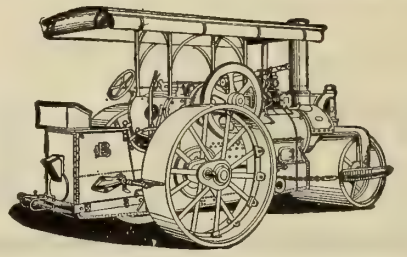

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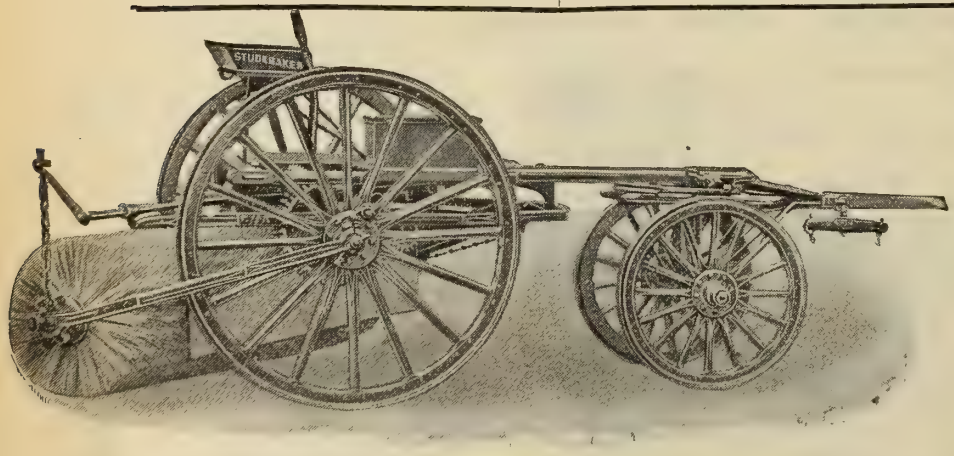

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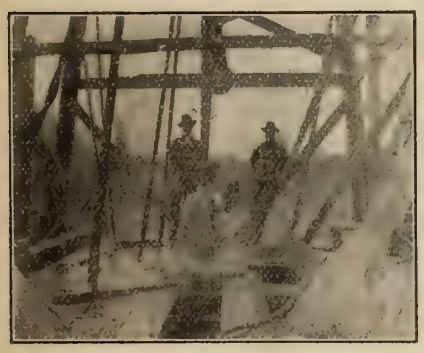

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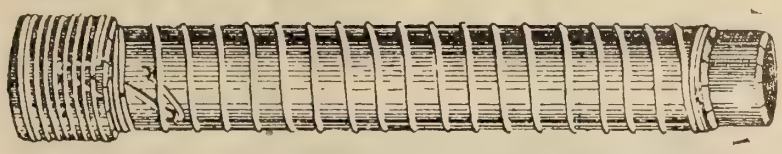

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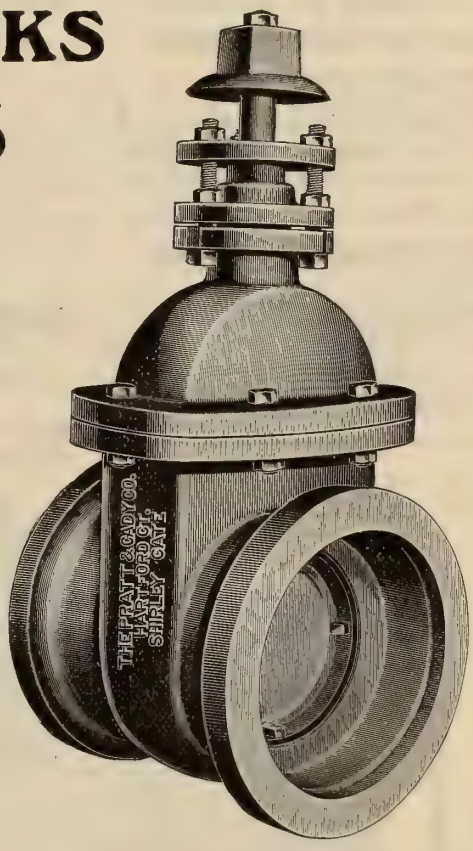

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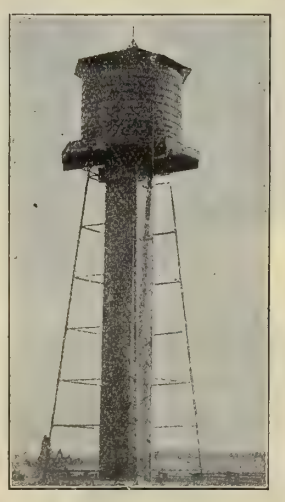

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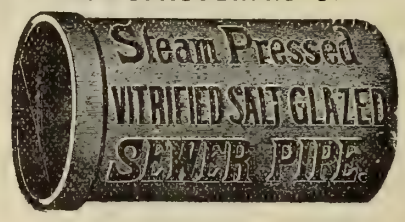

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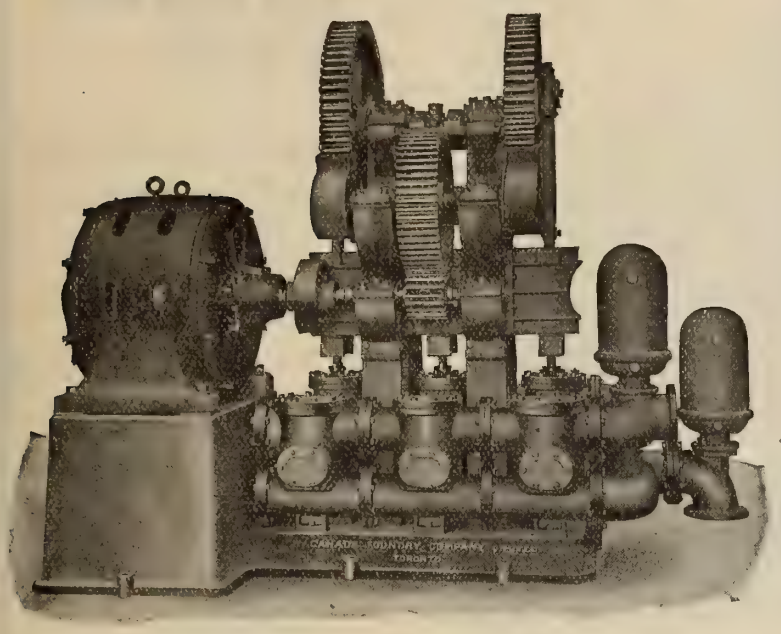

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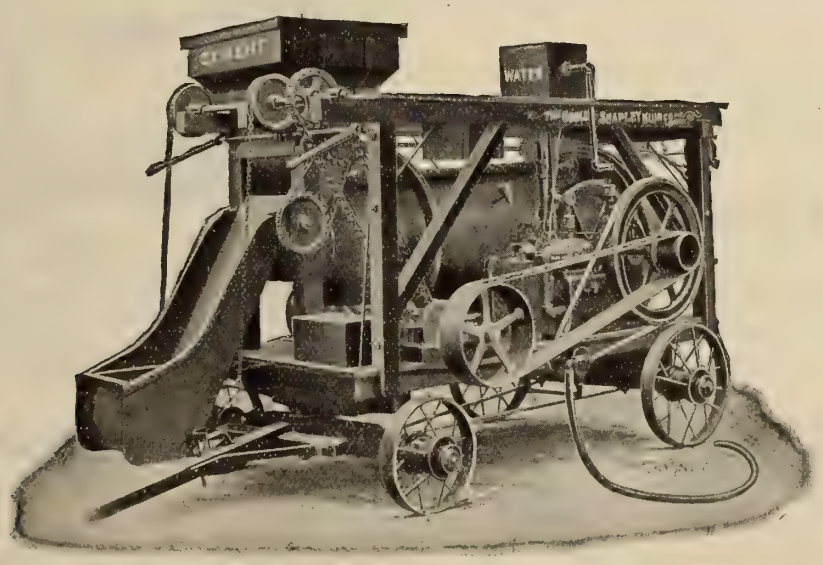

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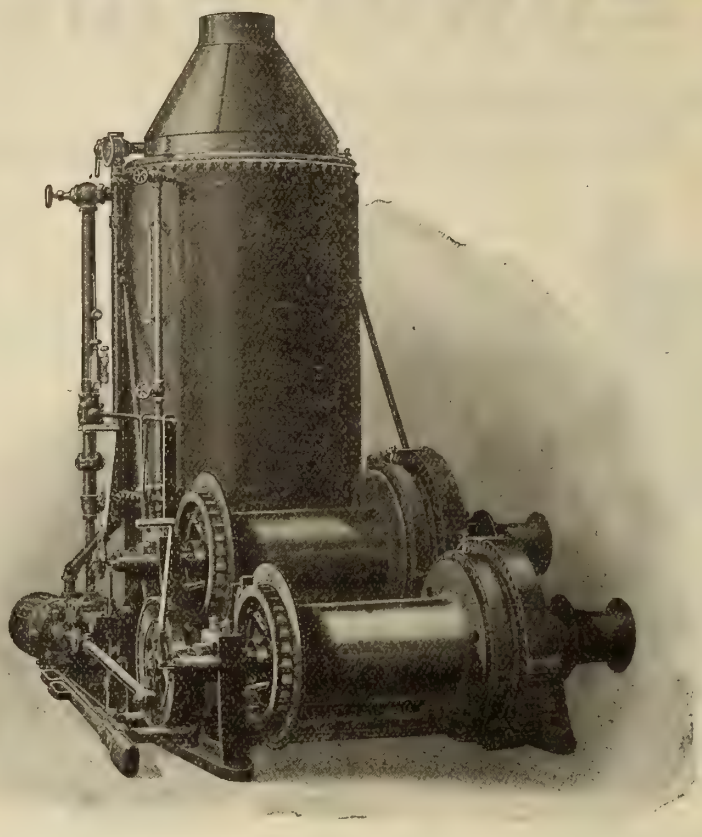

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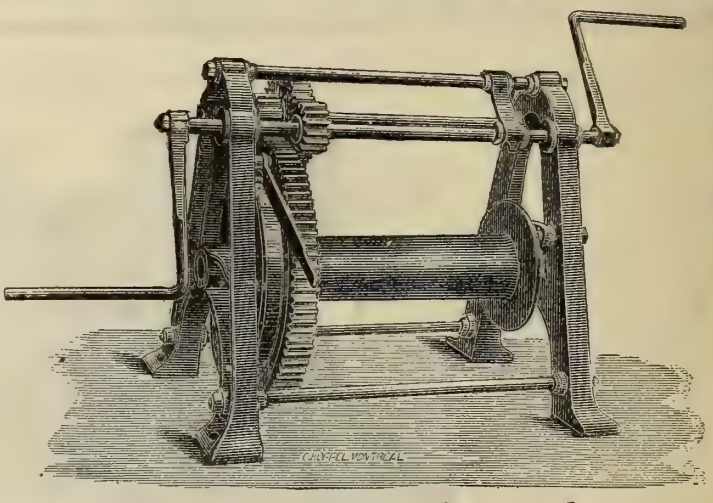

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A Weekly Journal of Public Works, Tenders, Advance Information and Municipal Progress

This Paper Reaches Every Week the Town and City Clerks, Town and City Engineers, County Clerks and County Engineers, Purchasers of Municipal Debentures and Leading Contractors in All Lines Throughout Canada

VOL. 17. TORONTO, MONTREAL — MAY 2, 1906 — WINNIPEG, VANCOUVER No. 9

THE CANADIAN CONTRACT RECORD
PUBLISHED EVERY WEDNESDAY

As an intermediate Edition of the Canadian Architect and Builder.

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TENDERS WANTED

for heating and ventilating the Picton Public School Building by steam, each tender to be accompanied by full specifications and a plan of the system, also a marked cheque for 5% of the amount of the tender. Lowest or any tender not necessarily accepted. Tenders received up to MAY 16TH, 1906.

P. C. MACNEE,
Secretary Picton Public School Board.
Picton, April 23rd, 1906.

AGENTS WANTED

Civil engineers know that the semi-regular built road, the BUDAPEST ROAD, was laid in 1875, and that it has been successfully used in DIFFICULT POSITIONS since, both THERE and IN BELGIUM and GERMANY. The PRINCIPLE upon which this road was built has been thoroughly demonstrated by THIRTY (30) YEARS' PRACTICE.

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Agents wanted throughout Canada for this road. Address **The Nash Road**, Borough of Brooklyn, N. Y. City.

TENDERS
for
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ETC.

Proposals will be received by the undersigned up till noon on MONDAY, THE 7TH DAY OF MAY, 1906, for the erection of a steel rivetted truss bridge, 120 feet clear span, 16 feet clear roadway, to carry a 6 inch concrete floor and a live load of 100 lbs. per square foot. The bridge to be erected over the River Canard between the Townships of Anderdon and Sandwich West, in the County of Essex, 6 miles from Amherstburg.

JOHN F. MILLEN,
County Clerk of Essex,
Sandwich, Ont.
Sandwich, April 14th, 1906.

Debentures For Sale

Tenders will be received up to the 14TH DAY OF MAY, 1906, by the undersigned, for the purchase of $4,000.00 worth of Debentures of the Township of Hullett, payable in twenty annual instalments, interest at 4 per cent. Particulars will be furnished on application to the undersigned.

JAMES CAMPBELL,
Clerk of Hullett Township,
Londesboro P. O.

TENDERS

whole or separate, will be received by the undersigned up to noon of MONDAY, 7TH MAY, next for the several trades involved in the erection of a 3-storey Bank and Office Building in Orillia for R. R. Slaven, Esq.

The lowest or any tender not necessarily accepted.

Plans and specifications may be seen at the office of the Architects,

CROKER & HOY,
Orillia, Ont.

Cast-Iron Pipe

Sealed bids or tenders will be received by the Town of St. Stephen until eight o'clock, p.m., of THURSDAY, THE TENTH DAY OF MAY, 1906, for furnishing approximately one thousand (1,000) tons of 10" and 14" cast-iron pipe and special castings.

Specifications may be seen at the office of the Town Clerk, St. Stephen, N. B., or at the office of the CANADIAN CONTRACT RECORD, Montreal.

All bids must be accompanied by a certified check for Five Hundred Dollars ($500.00), and security in the amount of Five Thousand Dollars ($5,000.00) will be required for the faithful performance of the contract.

The Town reserves the right to reject any or all bids.

J. VROOM,
Town Clerk.
St. Stephen, N. B., April 16, 1906.

City of Fredericton,
New Brunswick.

Bids will be received at the offices of the City Clerk until WEDNESDAY, THE 23RD DAY OF MAY, 1906, at eight o'clock in the evening, for improvements in the City Water Works, including the following contracts:

1. For the construction of concrete and brick work in clear well, filter tanks, filter building and extension of pumping station.
2. For the equipment of a complete Mechanical Filter Plant.
3. For duplicate Low Lift Centrifugal Pumps and Direct Connected Engines.
4. For High Duty Pumps.

Deposit cheques certified will be required with each bill.

Bids must be made on blank forms of proposal to be furnished. Plans may be seen and specifications and bidding papers obtained at the offices of the City Clerk, Fredericton, or of the Engineer, Boston.

The City reserves the right to reject any or all bids or to accept any bid.

J. W. McCREADY, City Clerk,
Fredericton, N. B.
F. A. BARBOUR, Consulting Engineer,
Tremont Building, Boston, Mass.
Dated April 24th, A. D. 1906.

Notice to Contractors

Tenders will be received up to MAY 8TH for the excavating, grading and laying of an asphalt block pavement on Main street, Seaforth.

Block will be furnished by the town.

Plans and specifications can be seen on and after April 30th. No tender necessarily accepted.

M. BRODERICK,
Chairman Board of Works.
Seaforth, Ont

Paving Tenders

Sealed tenders will be received by the undersigned up to 4 p. m. MAY 10TH, 1906, for supplying f. o. b. cars, Regina, Sask., the wearing surface for 30,000 square yards of pavement. Prices to be quoted per square yard completed pavement measurement, as follows:

1. **Sheet Asphalt.**
2. **Bitulithic.**
3. **Creosoted Wood.**
4. **Asphalt Block.**
5. **Vitrified Block.**

ANGUS SMITH,
City Engineer.
Regina, Sask., April 21st, 1906.

TENDERS FOR
Drainage Works

The Corporation of the Township of Cavan will receive sealed tenders marked "Tender for Drainage Works," and addressed to John J. Fair, Millbrook P. O., up to noon of SATURDAY, 26TH MAY, 1906, for the construction of Drainage Works a distance of about seven miles through the Townships of Cavan and North Monaghan, according to plans and specifications made by John E. Belcher, Engineer, which may be seen at the office of John J. Fair, Township Clerk, Millbrook.

Each tender must be accompanied by an accepted cheque drawn upon any chartered bank in Canada, payable to the order of "The Treasurer of the Township of Cavan," for the sum of $500, or in lieu thereof a cash deposit of said amount, which will be subject to forfeiture in the event of failure on the part of the Contractor to enter into a satisfactory written contract when notified to do so.

The contractor whose tender is accepted will be required to furnish a bond for $2,000 satisfactory to the Township Council, and the Contractor will also be required to enter into a special covenant not to unnecessarily interfere with or endanger public traffic on the township highways during the construction of the works.

The Township Council reserve the right to reject any or all tenders or to accept any bid which may appear advantageous to the Township of Cavan.

JOHN J. FAIR, Township Clerk,
Millbrook, Ont.
Dated at Millbrook this 24th April, 1906.

[FOR ADDITIONAL ADVERTISEMENTS FOR TENDERS SEE NEXT PAGE.]

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GEO. W. GOUINLOCK, Architect,
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TENDERS

separately or in bulk, will be received by the undersigned, up till noon, SATURDAY, MAY 12TH, for the erection of an Infants' Home for the House of Providence, Toronto. The lowest or any tender not necessarily accepted.

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Wanted, a partner with $10,000 or more to take share in good established Building Material Business. Experience not necessary. Apply Box 33, STEINBACH P. O., Manitoba.

TO CONTRACTORS

Tenders will be received until WEDNESDAY, MAY 9TH, for the work of all trades in connection with the erection of

A Large Brick and Concrete Fire-Proof Garage

to be erected on the corner of Shuter and Victoria streets. Plans and specifications can be seen and all other information obtained at the office of the architect.

E. J. LENNOX, Architect,
Toronto, Ont

CONTRACTS OPEN.

ESTERHAZY, SASK.—J. Sanders will erect a grist mill here.

TRURO, N. S.—Fraser, Fraser & Co. will build a store on Inglis street.

WETASKIWIN, ALTA.—Mr. Knight will erect a large store on Pierce street.

LEAMINGTON, ONT.—J. L. Wagner will erect a large warehouse for machinery.

WAPELLA, SASK.—A by-law has been carried to build a town hall, cost $10,000.

ARDEN, MAN.—M. E. Broughton has taken tenders for erection of a three-story hotel here.

SUMMERLAND, B. C—A site has been choseu for the new Baptist College, cost $25,000.

INGERSOLL, ONT.— The Merchant's Bank will erect a new building here, cost $20,000.

SARNIA, ONT.—The Council have decided to ask for tenders for paving George street.

BRADFORD, ONT.—G. W. Stoddart purposes erecting a new building on Holland street.

THOROLD, ONT.—The installation of a water-works system here is again being discussed.

RENFREW, ONT. — Tenders have been taken for extension of the Bank of Ottawa building.

ORILLIA, ONT.—The Town Council purpose constructing several cement sidewalks in the west ward.

GRAVENHURST, ONT.—A by-law was carried to raise $5,000 for construction of cement sidewalks.

CARSTAIRS, ALTA. — The Methodist congregation have plans prepared for a new church building.

MONCTON, N. B.—The congregation of the First Baptist church will enlarge their church building.

TEVIOTDALE, ONT.—W. G. Nicholson will receive tenders up to May 15th for rebuilding school house.

PETROLEA, ONT.— Tenders will soon be called for the restoration of the pork-packing establishment.

ROSTHERN, SASK. — G. Braden has taken tenders for erection of an addition to the school building here.

LAMONTE, ALTA.—The Methodist and Presbyterian congregations have decided to erect a union church here.

ELMWOOD, MAN.—S. Cruickshank intends building a three-storey hotel on Lemoine street. Mr. Barton, architect.

PARIS, ONT.—The Penman Manufacturing Co. are asking for tenders for erection of a brick chimney 150 feet high.

ST. MARY'S, ONT.—On May 19th a by-law will be voted on to raise $10,000 for sidewalks, permanent roads, etc.

FENELON FALLS, ONT. — Plans are being made for rebuilding the factory of the Fenelon Falls Furniture Co.

MELITA, MAN.—A by-law will be voted on to raise $10,000 for town hall building and $5,000 for cement sidewalks, etc.

SAULT STE. MARIE, ONT.—The Dominion Government propose construting a new canal here, cost about $10,000,000.

WOODSTOCK, N. B.—J. C. Hartley, Town Clerk, will receive tenders up to May 7th for $80,000 4 per cent. debentures.

MILTON, ONT.—J. A. Waldie will receive tenders up to May 5th for construction of a cement bridge on Main street.

WOODSTOCK, ONT. — The Warren Church Organ Co. will build new factory buildings here for manufacture of organs.

COLLINGWOOD, ONT. — The Dominion Parliament are taking steps for the building of a new dock here, cost $30,000.

BOWDEN, ALTA.—A new brick school will be built this summer, cost $8,000. Lawson & O'Gara, Calgary, architects.

MIMICO, ONT.—The plans for the new building at the Victoria Industrial School have been completed, and building will soon begin.

SEAGRAVE, ONT.—J. Gibson will receive tenders up to May 12th for erection of a brick church here. Plans at Methodist parsonage.

BROCKVILLE, ONT.— B. Dillon, architect, will receive tenders up to May 5th for erection of a residence on Bethune street for J. Deacon.

CREEMORE, ONT. — The G.T.R. have purchased a site, corner of Mill and Francis streets, on which it is expected a new station will be built.

CARLETON, PLACE, ONT.—A. R. G. Peden, Town Clerk, will receive tenders up to May 5th for delivery of five car loads of Portland cement.

DURHAM, ONT.—A. Davidson will receive tenders up to May 12th for improvements to the building of the South Grey Agricultural Society.

THAMESFORD, ONT.—B. B. McCarty will receive tenders up to May 5th for erection of five cement bridges in Township of East Nissouri.

CARBERRY, MAN.—R. A. Garland will receive tenders up to May 7th for installation of an electric light plant, also for engines, poles and wiring.

SHOAL LAKE, MAN. — W. M. Ingersoll will receive tenders up to May 5th for the erection of a school house for Sylvester Hill School District.

PETERBORO, ONT.—The plans of J. E. Belcher, for the House of Refuge have been approved and tenders will soon be called for erection of building.

ST. CATHARINES, ONT.— The Welland House will have an addition built this summer.—S. McLean will erect a new residence on Church street.

VICTORIA, B. C.—Hooper & Watkins, architects, have taken tenders for the erection of a children's ward at the Provincial Royal Jubilee hospital.

MCKELLAR, ONT. — E. Gardiner will receive tenders up to May 15th for building school house. Plans with J. Augst or A. Buchanon, Dunchurh.

KAMLOOPS, B.C.—General Superintendent Marpole, of the C.P.R., has given assurance that the company will assist in building a large hotel here.

KENORA, ONT.—The Maple Leaf Flour Mills Co. have taken tenders for the erection of a flour mill, an ironclad wooden working house, and an elevator.

HARDING, MAN.—W. Bastard will receive tenders up to May 10th for erection of a brick school house. Plans at his office and with T. Sinclair, architect, Brandon.

DIDSBURY, ONT.—A two-storey brick school building is to be erected, cost $10,000.—A. R. Routh, of the Pacific Elevator Co., will build a house this season.

FORT FRANCIS, ONT.—The Town Council have decided to install waterworks sewerage, and electric light to cost about $57,000, from plans by John Galt, C. E., Toronto.

EGANVILLE, ONT.—R. Bannerman, Village Clerk, will receive tenders up to May 21st for erection of a town hall. Plans at his office and with M. Gorman, architect, Pembroke.

LETHBRIDGE, ALTA.— J. A. Macdonald, architect, has prepared plans for the new building for the Lethbridge Brewing & Malting Company, corner Victoria street and Seventh avenue.

VANCOUVER, B. C.—P. Burns & Co. are having plans prepared for a new packing house and abattoir.—A new hotel will be built in North Vancouver for L. Rida, of Victoria, cost $10,000.

AMHERST, N.S. — The Amherst Foundry Co. will enlarge their moulding shop and plant.—It is said that Rhodes, Curry & Co. will establish a rolling mill in connection with their plant here.

GALT, ONT.—The Galt Paper Box Co. will begin building their new factory on King street at once.—A club house will be erected on the Preston road by capitalists of Galt, Preston and Berlin.

WELLAND, ONT.—The Board of Trade wish a by-law submitted for the purchase of a site for a machine tool factory. G. C. Brown is interested.—C. Collins will build a residence on Jane street.

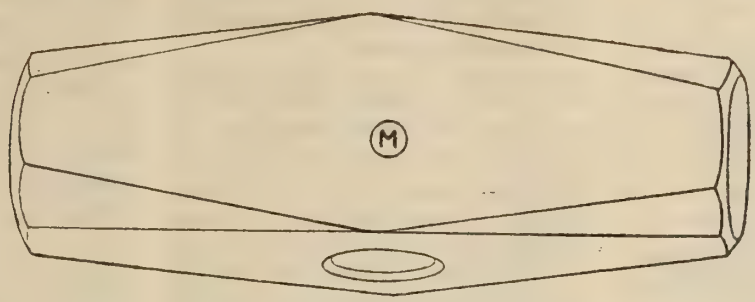
SYDNEY, N. S.—Tenders will be received by E. F. Jarvis, Department of Militia, Ottawa, up to May 10th. for construction of a rifle range. Plans with Major W. Crow and Director of Engineer Services, Ottawa.

REGINA, ALTA. — Minneapolis capitalists will establish a flax mill here this season.—The City Council have made the following appropriations for civic improvements: water mains, $26,850, sewers, $10,700.

BRANDON, MAN.—The City Engineer has been instructed to prepare plans for a new steel bridge on Eighteenth street.—The plans of W. A. Elliott, architect, for the new Collegiate Institute building, have been accepted by the Board.

SOREL, QUE.—F. Gourdeau, Deputy Minister of Marine and Fisheries, Ottawa, Ont., will receive tenders up to May 23rd for one direct connected dredging pump and triple expansion steam engine. Specifications with G. J. Desbarats, director of ship-yards.

OWEN SOUND, ONT. — F. Burnett, consulting engineer, has recommended improvements to the gas plant



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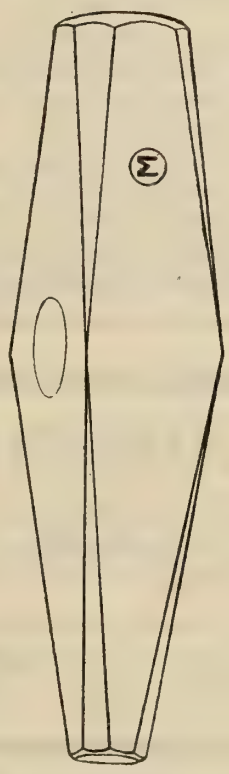
Car Movers
Wheelbarrows



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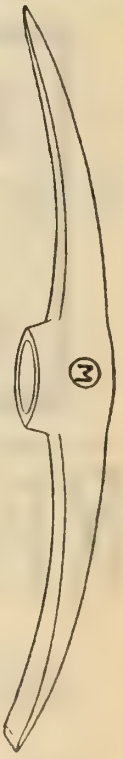

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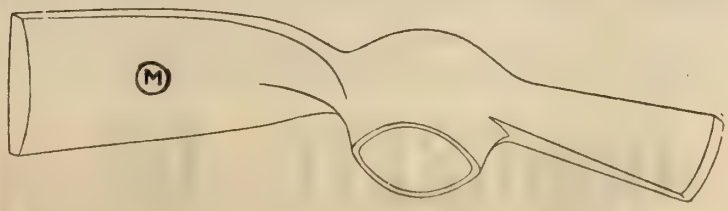

here to cost $24,511.—Two by-laws have been passed to provide for extension of gas plant and of electric light plant, $45,000 for each.

GUELPH, ONT.—The old-buildings of the Crowe Iron Works have been purchased by a local company who expect to remodel them into dwelling houses.—C. & R. Crowe will establish a foundry and piano plate factory, cost about $50,000.

MINIOTA, MAN.—W. Howard will receive tenders up to May 15th for the construction a Howe truss bridge on pile abutments over the Assiniboine river. Plans with above named and at Public Works Department, Legislative Buildings, Winnipeg.

GRAND FORKS, B. C.—C. Brown, of the Boundary Iron Works, will erect a residence on Winnipeg avenue, cost $3,000.—The Kettle River Irrigation Fruit Lands' Company, propose bringing water from Rock Creek to their lands by a flume, cost $30,000.

FREDERICTON, N. B.—Tenders are requested by J. W. McCready, City Clerk, up to May 23rd. for waterworks improvements, including concrete and brick work and supply of filter plant, centrifugal pumps, direct connected engines and high duty pumps.

ROBLIN, MAN.—F. Y. Newton, F. Fulkerson, W. Holmes, J.W. Atkey, and J. G. Struthers intend building residences here this summer.—The C.N.R. propose erecting an automatic coal dock.—The Ogilvie Milling Co. and A. Setter, of Russell, will build elevators this summer.

MEDICINE HAT, ALTA.—W. T. Williams, architect, is preparing plans for a large brick and stone store and office building on Main street.—A brick and stone Y.M.C.A. building will probably be built this summer.—A two-storey addition to the hospital building is being discussed.

INNISFAIL, ALTA.—The Alberta Pacific Elevator Co. expect to build a new elevator here this season.—The School Trustees are considering the erection of a new school, cost $15,000.—A by-law has been passed to raise $10,000 for erection of a fire hall and purchase of fire brigade equipments.

CALGARY, ALTA. — The Western Oil & Coal Co., of Vancouver, are applying to the Alberta Legislature for a charter to construct a forty-mile pipe and build an oil refinery on the Crow's Nest Pass branch, cost $150,000.—An addition is to be built to the Western Canada College.—St. Hilda's College is to be enlarged, cost $3,500.

HAMILTON, ONT.—The Canadian Canners, Limited, will build a new factory corner of Cannon and Caroline streets, cost $20,000.—F. Symthe will build a brick house on Stanley avenue, cost $2,400.—The plans of Architect Mills for enlargement of the Gospel Tabernacle have been approved, cost $25,000.

PRINCE ALBERT, SASK.—The Prince Albert Lumber Company will build an addition to their mill, cost $60,000.—Presbyterian congregation purpose erecting a church, cost $25,000.—A new R. C. church is proposed, cost $60,000.—MacKay & Adam purpose building a business block, cost $15,000.—Davis & Stewart expect to build a block, cost $10,000.

LONDON, ONT.—T. Walker will build a two-storey dwelling at 555 Hill street.—J. B. Mortimore will build a brick residence on Waterloo street. — Messrs. Lightheart have bought sites on Dundas street, East London, for erection of two stores.—The W.C.T.U. are preparing for the erection of a new building.—The School Board recommend the issue of $10,000 debentures for addition to Chesley avenue school. — The City Council will ask the Legislature to approve of the issue of $11,000 debentures for waterworks improvements.

EDMONTON, ALTA.—The Alberta Milling Co. have taken out a permit for a warehouse on Third street, 25 × 60 feet.—Dr. Smith will build a residence on Jasper avenue, cost $3,700.—Tenders for the new Imperial Bank block will be received up to May 5th, of stone, Johnson & Barnes, architects.—W. Dodd, architect, is preparing plans for a block corner of Seventh avenue and Hardisty street for the Club Chambers Co., brick, three-stories, 50 × 150 feet.—A Building Committee has been appointed to solicit subscriptions for a new Y.M.C.A. building, cost $60,000.

SASKATOON, SASK.—W. W. LaChance, architect, has taken tenders for the erection of a business block for The Phœnix on Second avenue, also for a business block on Second avenue for Young & MacBeth. — A by-law will be voted on to raise $25,000 for two school buildings.—Plans have been prepared for a store building for J. Clinkskill, three-stories, cement blocks, cost $30,000, and for Wilson Hotel to be built corner of Avenue A and Twentieth street, cost $30,000.—C. E. Strickland & Company, will build a warehouse 40 x 60 on Twenty-third street.—The Canadian Bank of Commerce have plans prepared for a branch building, Roman stone, cost $50,000.—W. P. Kirkpatrick will build a residence on Spadina cresent.—W. P. Bate will build a residence on the river front, cost $3,000.

BRANTFORD, ONT.—G. W. Hall, architect, is this week taking tenders for erection of a residence for T. Hollinrake. Plans at 321 Colborne street.—W. Smith will erect a double brick dwelling on Park avenue.—The Imperial Bank have leased a block on George street which will be remodelled for a bank building.—The Brantford Cordage Co. intend enlarging their building this season.—A. J. Cromer will build a brick dwelling on Colborne street, cost $2,200.—Tenders will be taken up to May 8th for improve-

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ments on Y.W.C.A. building, cost $10,000. Plans at 321 Colborne street. G. W. Hall, architect.—The directors of the Cockshutt Plow Company have decided to make large additions to their works here.

FORT WILLIAM, ONT.—Plans are being prepared for the new buildings to be erected by the Canada Iron & Foundry Co. of Montreal. A. Pringle & Sons, Montreal, are interested.—J. A. Timbers intends building a three-storey brick hotel on May street.—The Commercial Club will build a brick addition to their club house on George street.—J. F. Boyd, of Sault Ste. Marie, expects to build a two-storey warehouse on Hardisty street.—J. C. Stinson, architect, is preparing plans for a three-storey brick hotel, corner of Brown and Gore streets, for Moffat & Rapelje.—W. W. Black intends building a three-storey brick hotel at Westfort.—S. F. Flatt will build a residential block corner of Myles and Archibald streets. — Schwan Bros., brewers, of Owen Sound, have secured options on site here for a brewery building.

WINNIPEG, MAN.—J. H. Agnew will receive tenders up to June 1st for purchase of $162,000 4 per cent. debentures of drainage district No. 5 and $22,000 debentures drainage district No. 15.—G. G. Teeter, architect, has taken tenders for the erection of the Tabernacle Baptist church.—Kilgour, Rimer & Co., wholesale boot and shoe merchants, are having plans prepared for an addition to their warehouse, corner of Princess street

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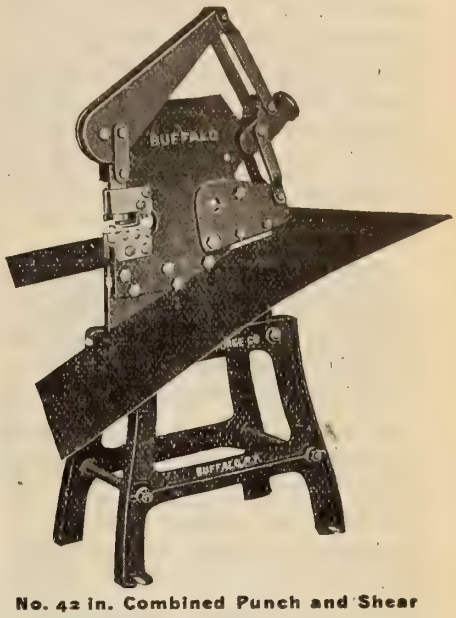

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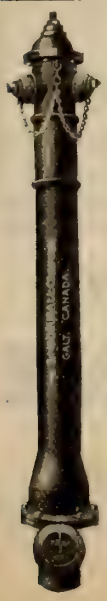

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and McDermot avenue.—V. Barton, architect, has prepared plans for a residence, 46 × 45 feet, on Pacific avenue, to be built of local brick and Tyndall stone dressings.—V. W. Horwood, architect, has prepared plans for a one-storey office building for Gordon, Ironsides & Fares, at their Logan avenue abattoir, cut stone, 70 × 50 feet, cost $20,000.—The Meiselt Manufacturing Co., of Port Huron, Mich., will establish a branch factory here and also erect a model mill.—Suckling & Co., of Montreal, are considering the erection of a large block on Princess street for a branch business.

MONTREAL, QUE. — The American Tobacco Co. are having plans prepared for rebuilding their factory recently burned on St. Antoine street, five stories, 185 x 370 feet, cost $250,000.—It is understood that the C.N.R. will soon begin building the proposed grain line from French river to this city.—Hon. Jules Allard states that plans are being prepared for a new jail building to be erected at an early date.—Building permits have been granted as follows: E. Lauthier, St. Elizabeth street, brick and wood dwelling, cost $5,000; Napolian Vallee, Cote St. Paul, brick and stone dwelling, cost $10,000; Mrs. Jas. Gauthier, St. Hubert street, dwelling, brick and stone, cost $5,000; Carona Rubber Co., Pauport, factory, brick and wood, cost $6,000.—Halpin & Vincent, architects, have prepared plans for a new morgue on Notre Dame street.—A natural history building will be erected for McGill University on Drummond street, three stories high, with mezzanine floor, local brick and stone to be used.—The plans of Marchand & Maxwell, architects, for the proposed mountain lookout, have been approved by the Parks and Ferries Committee, cost about $16,000.

TORONTO, ONT.—E. J. Lennox, architect, will receive tenders up to May 9th for erection of a brick and concrete fire-proof garage, corner Shuter and Victoria streets.—The Board of Control will receive tenders up to May 8th for construction of the following works: Asphalt pavement, Yonge street, from Queen to Bloor; on Birch avenue, from Yonge street to West End; on Richmond street, from Jarvis to Church; concrete pavement on Rush Lane, from Esther to Portland street, also for a number of concrete sidewalks.—The members of St. Cyprian's church have decided to erect a new church building, corner Follis and Manning avenues, cost about $20,000.—A.G. Strathy & Co. have sold the property at corner of Adelaide and Duncan streets to Fred Brydon, who will erect a lithographing establishment.—The Continental Life Assurance Co. have had plans prepared for two additional stories on the Medical building, corner Bay and Richmond streets.—W. Postlethwaite, Harbour Master, will receive tenders up to May 8th for concrete work at the Queen's wharf. Plans at 508 Board of Trade building.—Andrew Carnegie has donated $50,000 to Victoria University for a library and steps will be taken for the erection of a new building.—Mr. Phippen will build five houses in Riverdale this spring.—J. Carling Kelly, an American theatre promoter, has been in the city in connection with another Vaudeville theatre proposed to be built here.—The Stewart Hartshorn Co. have secured a site on River street where they expect to erect a factory.—Frankel Bros., metal merchants, are having plans prepared for a smelter to be built at Sunlight Park.—St. Anne's parish have decided to build a new church on St. Anne's road, cost about $30,000.—Tenders will be received at Room 26, 77 Victoria street, for erection of two brick houses.—Gordon & Helliwell, architects, Confederation Life Build-

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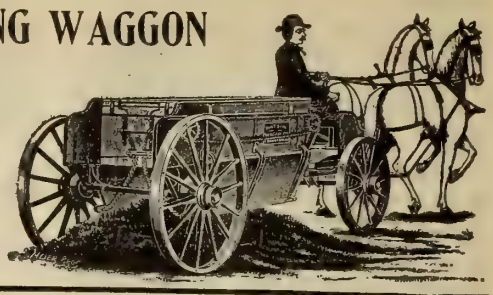

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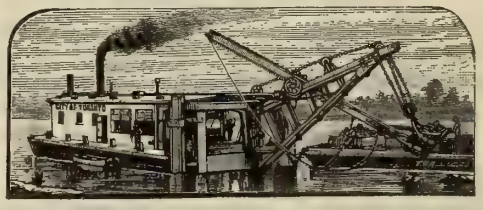

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ing will receive tenders up to May 4th for erection of two houses.—Plans for the new Simpson avenue Methodist church have been prepared cost $38,000. —It is said to be the intention of Mr. H. S. Mara and Mr. Matthews of Dun & Co., to build residences in Chestnut Park, Rosedale—The following building permits have been issued: A. E. Mathewson, 2½ story brick dwelling, 348 Shaw street, cost $3,100; J. Kennedy, 2 story brick dwelling, Grace street, cost $3,600; C. W. Chadwick, 2 story and attic brick and stone dwelling, 67 Beatty ave., cost $3,500; Love Bros., pair 2½ story brick dwellings, Victor ave., cost $5,000; J. W. Walker, four 2 story and attic stone and brick dwellings, Grace street, cost $10,000; W. R. Switzer, 2 story stone and brick dwelling, 303 Ossington ave., cost $3,000; Stewart & Scott, 2 story brick and stone store and dwelling, corner Perth ave. and Bloor street, cost $3,000; M. Neilson, 2½ story brick dwelling, Gladstone ave., near College street, cost $5,000; James Hewlett, pair 3 story stone and brick dwellings, Avenue road, near Cottingham street, cost $7,000; T. Whaley, two 2 story brick dwellings, Jameson ave., near Springhurst, cost $4,800; L. C. Sheppard, twelve brick dwellings, Montrose ave., near College street, cost $24,000; Ansman & Marshall, pair 2½ story stone and brick dwellings, Brunswick ave., near Wells street, cost $7,600; L. C. Sheppard, twelve 2½ story brick dwellings, Concord ave., near Hallam street, cost $24,000; Eaton & Smith, pair 2½ story stone and brick dwellings, Givens street, near Bloor, cost $7,000; S. J. Krause, pair 2 story and attic stone and brick dwellings, Crawford street, near Queen, cost $5,000; J. L. Nichols Co., 2 story stone and brick addition to factory, 292 Wellington street west, cost $5,000; F. J. Smale, 2½ story brick dwelling, 78 Glen road, cost $8,000; J. Bain, 2½ story stone and brick dwelling, St. George street, near Lowther ave., cost $14,000; D. Patterson, 2½ story brick and frame dwelling, Indian grove, cost $5,300; D. B. Bowerman, 2½ story brick dwelling, St. Clarens ave., near Bloor street, cost $2,500.

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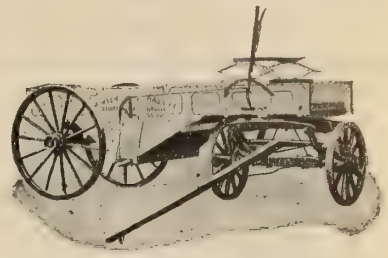

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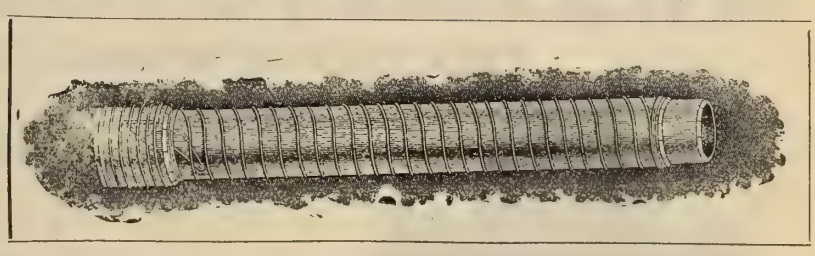

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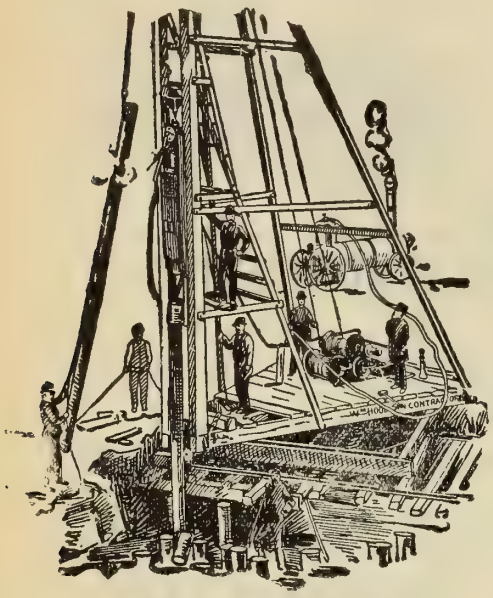

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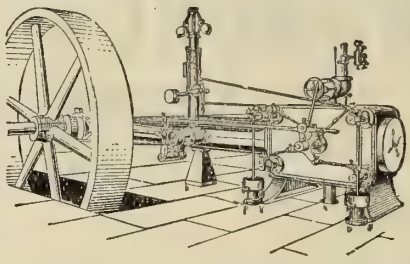

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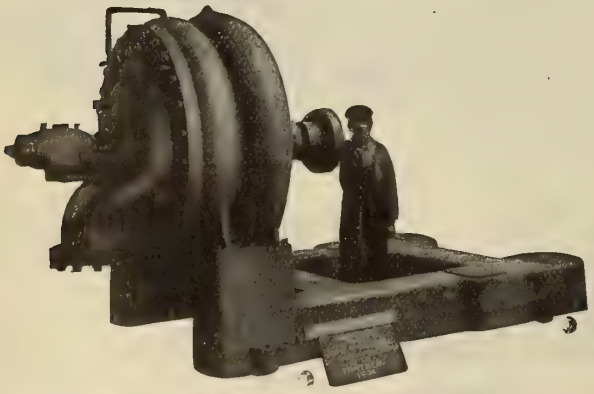

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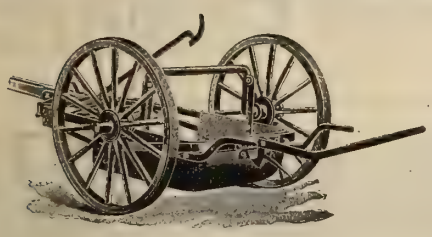

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							Neat.					3 (Sand) to 1 (Cement)				
					Initial	Final	1 dy.	7 dys.	28 dys.	3 mos.	1 yr.	1 dy.	7 dys	28 dys.	3 mos.	1 yr.
1903	20	O.K.	3.135	2.1	162	345	307	701	783	827	*	74	214	299	367	*
1904	44	O.K.	3.150	2.0	132	342	300	744	848	914	938	86	262	354	401	427

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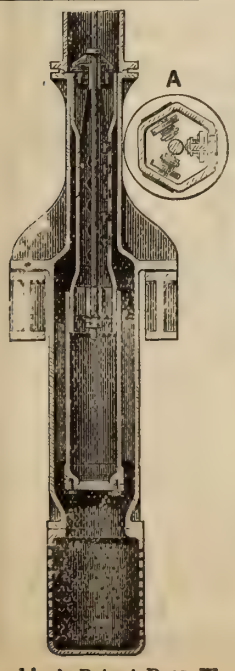

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FORT WILLIAM, ONT.—Construction of Frederica street sewer: A. Cameron, contractor, $29,000.

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COLLINGWOOD, ONT.—Sewer construction: C.H. Clarke, of Gananoque, successful tenderer, $49,930.

ST. ALEXANDRE, QUE.—New Presbytery building: Alexis Belanger, contractor, Quebec, $8,300; Ouellet & Levesque, architects, Quebec.

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SARNIA, ONT.—Extension to library building: Masonry, A. McDonald, $2,424; carpenter work, J. McIlhagga, $1,270; plumbing, Sarnia Gas, Plumbing & Heating Company, $125; heating, McKenzie, Milne & Company, $165; painting, James Yard, $132.—Addition to separate school building, corner of Durand and Christina streets: Building, Corrick & Sons, $3,300; heating, D. Kerr, $1,000.

OTTAWA, ONT.—Addition to Creighton street school: Brick and stone work, A. Garvock, $7,750; carpenter work, Taylor & Lackey, $4,997; plastering, J.F. Maunder, $436; painting, W.J. Carson, $650; roofing, J. Herbert & Son, $185; plumbing and heating, Thompson & Livock, $4,042; galvanized iron, McKinley & Northwood, $600; electrical work, Garrioch, Godard, & Company, $187.

WINNIPEG, MAN. — Five storey warehouse, corner of Market and Louisa streets, for H. Radford: J. McDermid & Company, contractors, cost about $50,000. J. D. Atchison, architect.—Construction of G.T.P.R from Winnipeg to Portage la Prairie: MacDonald, McMillan & Company, contractors.—Chapel and morgue at St. Mary's cemetery: J. McDermid & Company, contractors, $6,000. — 7,000 barrels Northampton cement for Bemis Bag factory building: Stinson, Reeb Builders' Supply Company, Montreal.—The Dominion Bridge Company, through their Winnipeg office, have secured the contract for all the structural steel work for the Fraser Block, Winnipeg, at $11,900. Wm. Grace & Company, Winnipeg, have the contract for the building at $150,000.

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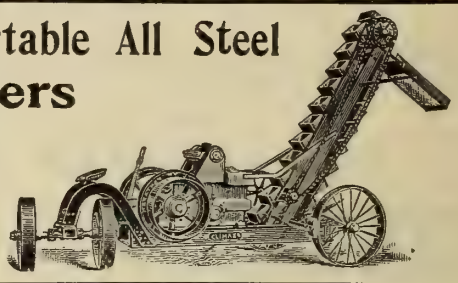

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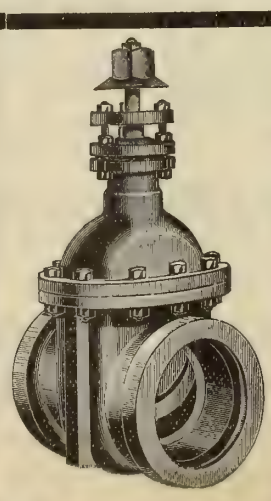

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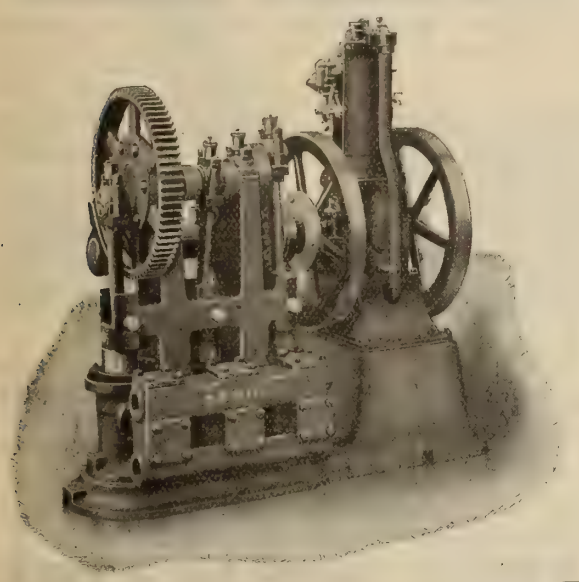

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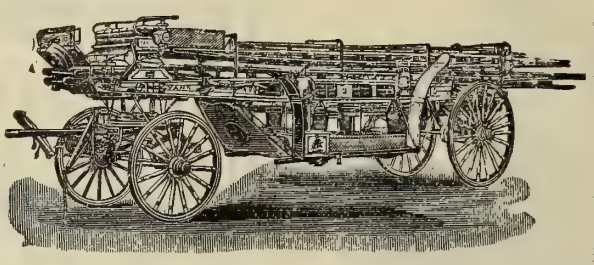

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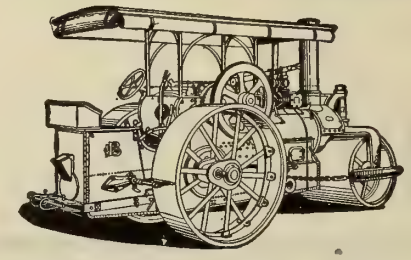

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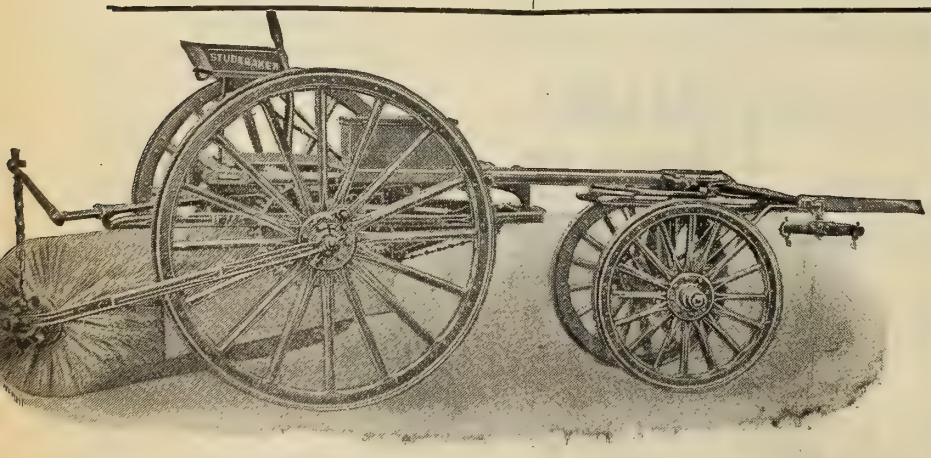

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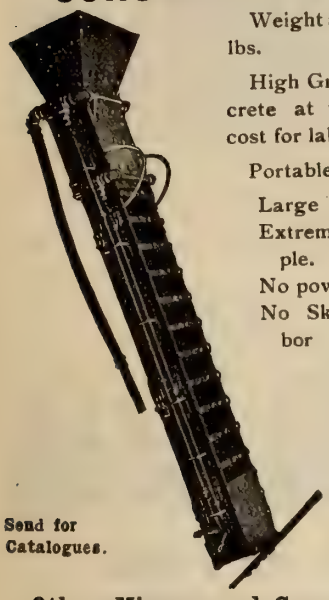

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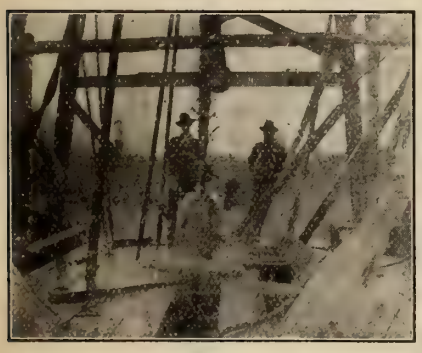

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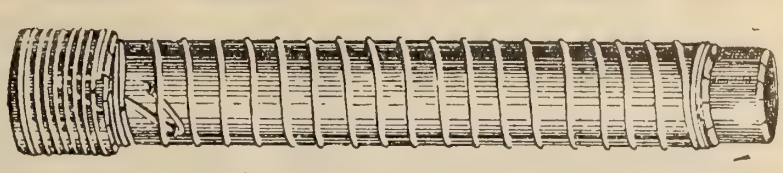

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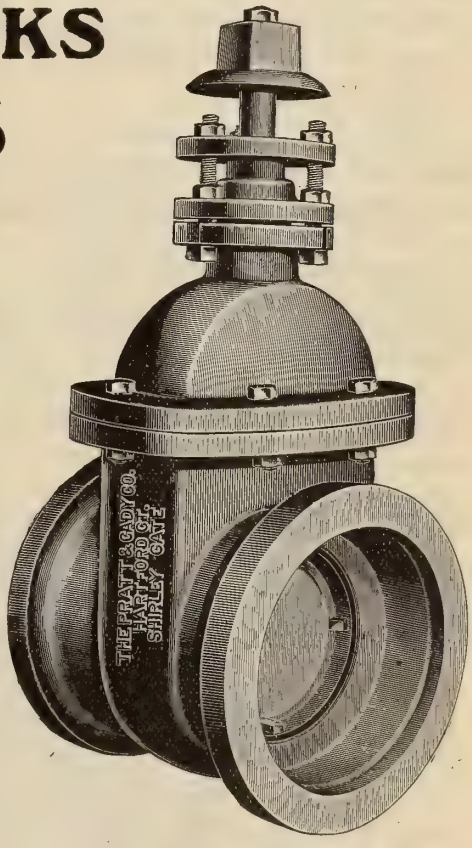

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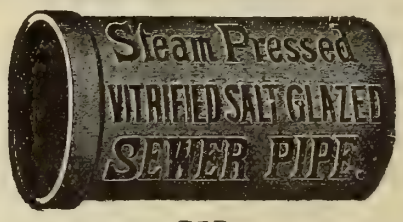

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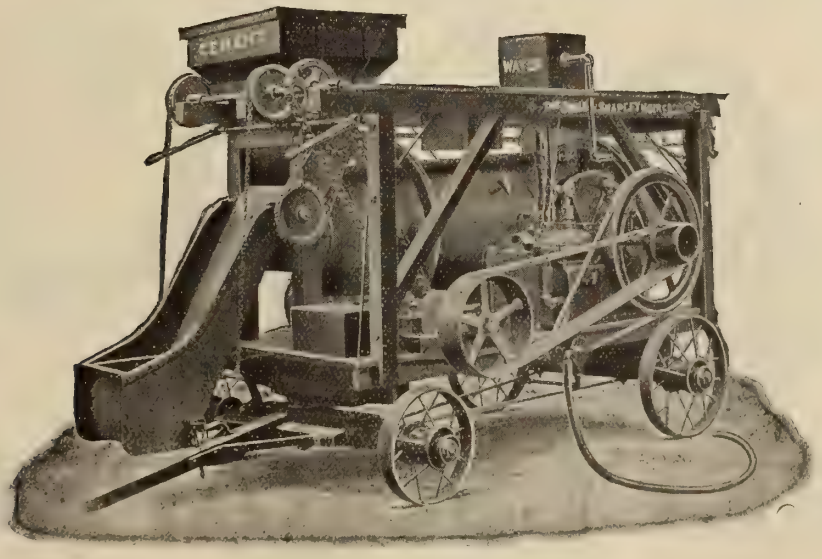

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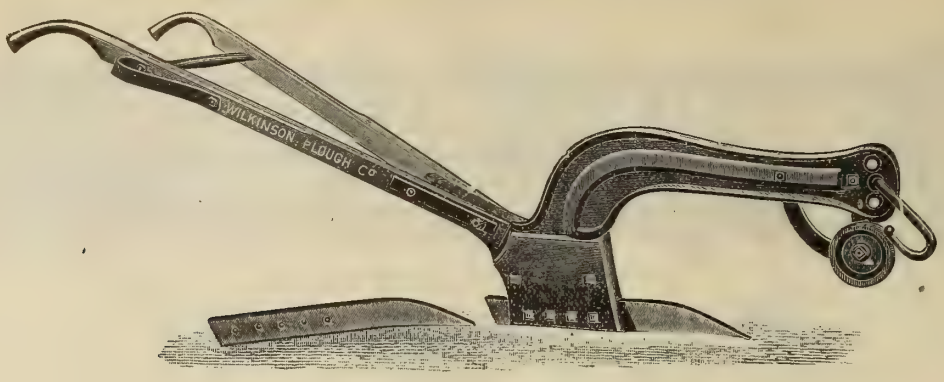

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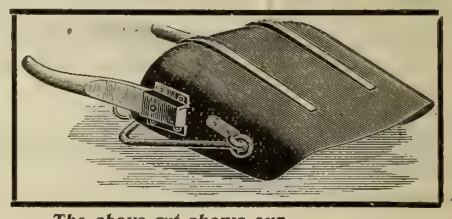

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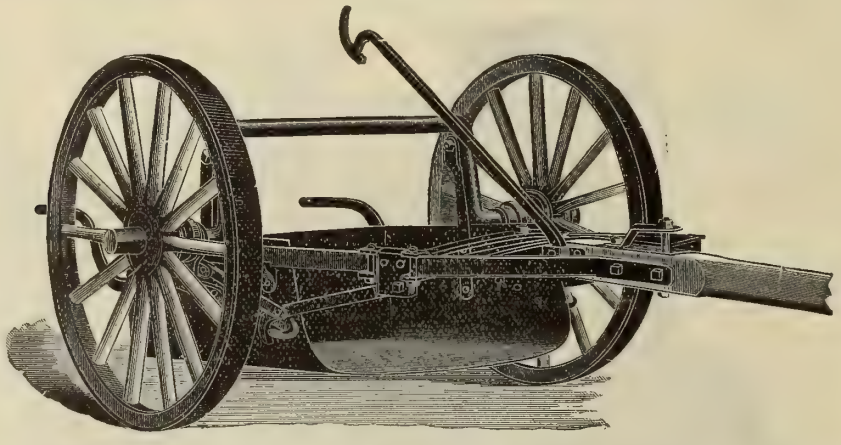

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CANADIAN

Contract Record

A Weekly Journal of Public Works, Tenders, Advance Information and Municipal Progress

This Paper Reaches Every Week the Town and City Clerks, Town and City Engineers, County Clerks and County Engineers, Purchasers of Municipal Debentures and Leading Contractors In All Lines Throughout Canada

VOL. 17. TORONTO, MONTREAL — MAY 9, 1906 — WINNIPEG, VANCOUVER No. 10

THE CANADIAN CONTRACT RECORD
PUBLISHED EVERY WEDNESDAY

As an intermediate Edition of the Canadian Architect and Builder.

THE C. H. MORTIMER PUBLISHING COMPANY
of Toronto, Limited,

Subscription Price, $2 per annum, payable in advance.

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Civil engineers know that the semi-regular built road, the BUDAPEST ROAD was laid in 1875, and that it has been successfully used in DIFFICULT POSITIONS since, both THERE and IN BELGIUM and GERMANY. THE PRINCIPLE upon which this road was built has been thoroughly demonstrated by THIRTY (30) YEARS' PRACTICE.

THE AMERICAN MECHANICAL APPLICATION of this principle in road building (**The Nash Road**) has been very different. It has been COMPLETE, not semi. FAR MORE EFFECTIVE, in MANY MORE WAYS, and is VERY MUCH CHEAPER.

Agents wanted throughout Canada for this road. Address **The Nash Road**, Borough of Brooklyn, N. Y. City, U.S.A.

PARTNER WANTED

Wanted, a partner with $10 000 or more to take share in good established Building Material Business. Experience not necessary. Apply Box 33, STEINBACH P. O., Manitoba.

TENDERS FOR

Stone Crushing Plant

Tenders will be received by registered post only, addressed to the Chairman of the Board of Control, City Hall, Toronto, up to noon on TUESDAY, MAY 22ND, 1906, for the supply of the following parts:

One 40 h.p. Boiler.
One 35 h.p. Steam Engine.
One 34 foot Elevator, 14" x 10" x 7" Buckets.
One 32" x 12' Revolving Screen.

Envelopes containing tenders must be plainly marked on the outside as to contents.

Specifications may be seen and forms of tender obtained at the office of the City Engineer, Toronto, on and after Thursday, the 10th instant

The usual conditions relating to tendering, as prescribed by the City By-law, must be strictly complied with.

The lowest or any tender not necessarily accepted.

E. COATSWORTH (Mayor),
Chairman Board of Control.

City Hall, Toronto, May 5th, 1906.

TENDERS

Tenders will be received by the undersigned until THURSDAY, MAY 17TH, for the construction of Granolithic Sidewalks in the Town of Uxbridge, Ont. The lowest or any tender not necessarily accepted Specifications may be seen at the Clerk's office.

J. W. GOULD,
Town Clerk.

To Contractors

Sealed bulk and separate bids will be received by the undersigned up to 12 o'clock, noon, on TUESDAY, MAY 15, for all trades involved in the erection of a Branch Bank Building for the Traders' Bank of Canada, at the northeast corner of Bloor and Yonge streets, Toronto.

The lowest or any tender not necessarily accepted.

F. S. BAKER, Architect,
Mail Building, Toronto.

Cast-Iron Pipe

Sealed bids or tenders will be received by the Town of St. Stephen until eight o'clock, p.m., of FRIDAY, THE TWENTY-FIFTH DAY OF MAY, 1906, for furnishing approximately one thousand (1,000) tons of 10" and 14" cast-iron pipe and special castings

Specifications may be seen at the office of the Town Clerk, St. Stephen, N. B., or at the office of the CANADIAN CONTRACT RECORD, Montreal.

All bids must be accompanied by a certified check for Five Hundred Dollars ($50 .00), and security in the amount of Five Thousand Dollars ($5,000.00) will be required for the faithful performance of the contract.

The Town reserves the right to reject any or all bids.

J. VROOM,
Town Clerk.

St. Stephen, N. B., April 16, 1906.

City of Fredericton,
New Brunswick,

Bids will be received at the offices of the City Clerk until WEDNESDAY, THE 23RD DAY OF MAY, 1906, at eight o'clock in the evening, for improvements in the City Water Works, including the following contracts:

1. For the construction of concrete and brick work in clear well, filter tanks, filter building and extension of pumping station.

2. For the equipment of a complete Mechanical Filter Plant.

3. For duplicate Low Lift Centrifugal Pumps and Direct Connected Engines.

4. For High Duty Pumps.

Deposit cheques certified will be required with each bill.

Bids must be made on blank forms of proposal to be furnished. Plans may be seen and specifications and bidding papers obtained at the offices of the City Clerk, Fredericton, or of the Engineer, Boston.

The City reserves the right to reject any or all bids or to accept any bid.

J. W. McCREADY, City Clerk,
Fredericton, N. B.

F. A. BARBOUR, Consulting Engineer,
Tremont Building, Boston, Mass.

Dated April 24th, A. D. 1906.

TENDERS

separately or in bulk, will be received by the undersigned up till noon, SATURDAY, MAY 12TH, for the erection of an Infants' Home for the House of Providence, Toronto. The lowest or any tender not necessarily accepted.

A. W. HOLMES,
10 Bloor East, Toronto.

SEALED TENDERS

will be received by the undersigned up to 6 p. m., MAY 14TH, for the construction of approximately 38,600 feet of concrete walks. Plans and specifications may be seen at the City Engineer's office. Tenders must be made on blank forms to be furnished. City reserves the right to reject any or all tenders.

S. J. MALLION,
Chairman Committee of Works,
Stratford, Ont.

Notice to Contractors

Sealed bulk and separate tenders will be received up till 4 o'clock p.m. on SATURDAY, 26TH MAY, 1906, for all trades required in the erection of a

Stone and Brick Methodist Church

at Campbellford, Ont., according to plans, specifications, etc., prepared by James L. Wilson & Son, Architects, Chatham, Ont.

Lowest or any tender not necessarily accepted.

Plans, etc., can be seen at the office of the Secretary, to whom all tenders shall be addressed.

Any other information can be obtained from the Architects.

C. W. TURNER, Secretary,
Campbellford, Ont.

TENDERS FOR

Drainage Works

The Corporation of the Township of Cavan will receive sealed tenders marked "Tender for Drainage Works," and addressed to John J. Fair, Millbrook P. O., up to noon of SATURDAY, 26TH MAY, 1906, for the construction of Drainage Works a distance of about seven miles through the Townships of Cavan and North Monaghan, according to plans and specifications made by John E. Belcher, Engineer, which may be seen at the office of John J. Fair, Township Clerk, Millbrook.

Each tender must be accompanied by an accepted cheque drawn upon any chartered bank in Canada, payable to the order of "The Treasurer of the Township of Cavan," for the sum of $500, or in lieu thereof a cash deposit of said amount, which will be subject to forfeiture in the event of failure on the part of the Contractor to enter into a satisfactory written contract when notified to do so.

The contractor whose tender is accepted will be required to furnish a bond for $2,000 satisfactory to the Township Council, and the Contractor will also be required to enter into a special covenant not to unnecessarily interfere with or endanger public traffic on the township highways during the construction of the works.

The Township Council reserve the right to reject any or all tenders or to accept any bid which may appear advantageous to the Township of Cavan.

JOHN J. FAIR, Township Clerk,
Millbrook, Ont.

Dated at Millbrook this 24th April, 1906.

[FOR ADDITIONAL ADVERTISEMENTS FOR TENDERS SEE NEXT PAGE.]

TENDERS

will be received until FRIDAY, MAY 11TH, for the various trades except plumbing and heating required in the erection of a House in Rosedale.

GORDON & HELLIWELL, Architects,
Confederation Life Bldg.,
Toronto, Ont.

TENDERS WANTED

Tenders will be received up to MAY 21ST NEXT for

1. 36 ft. Steel Bridge on Perth and Waterloo County line.
2. Painting Two Iron Bridges.

For specifications, etc., address

HERBERT J. BOWMAN, C.E.

Berlin, Ont., May 7th, 1906.

CONTRACTS OPEN.

ACTON, ONT.—H. McLaughlin will build a residence on Peel street.

AYR, ONT.—A by-law has been passed to issue $4,000 debentures for sidewalks.

EPWORTH, B. C.—It is proposed to erect a memorial church to Dr. E. Robson this year.

CARNDUFF, MAN.—R. H. Gordon has taken tenders for a six-roomed brick school house.

SIMCOE, ONT.—The Simcoe Canning Co. purpose making an extension to their store house.

GRAVENHURST, ONT.—A by-law has been carried to raise $5,000 for cement sidewalks.

RICHMOND, QUE.—A by-law has been passed to raise $25,000 to improve the water system.

WATERLOO, QUE.—A new academy building is proposed to be built at a cost of $12,000.

FLESHERTON, ONT.—Plans have been accepted for the new hotel, three-stories, 42 x 50 feet.

GRANBY, QUE.—The congregation of St. George's church purpose building a new church soon.

WALKERTON, ONT.—The Canada Furniture Co. have decided to enlarge the Rattan factory.

STOUGHTON, SASK.—R. McKenzie will receive bids up to May 15th for $4,000 school debentures.

SIDNEY, MAN.—S. J. Reglous will receive tenders up to May 12th for erection of new school building.

MACLEOD, ALTA.—The Methodist congregation purpose building a new stone church, cost $25,000.

LANCASTER, ONT.—K. G. Ross is asking tenders for erection of a school building, S. S. No 2 Front.

PORT ARTHUR, ONT.—The Western Elevator Co. have secured an option on a site for a large elevator.

KINGSTON, ONT.—A summer residence will be built near Mud Creek for Mrs. A. M. Macdonell, of Rochester.

DUNREA, MAN. — J. H. Putnam will receive tenders up to May 10th for erection of two-storey school house here.

HINTONBURG, ONT.—The Separate School Board are taking steps to replace the school building recently burnt.

KENTVILLE, N. S.—The Bank of Nova Scotia propose erecting a new building on the site of the Arnold block.

BELLEVILLE, ONT.—The Council have recommended the construction of granolithic walks on several streets this season.

WAPELLA, SASK.—T. F. Terry will receive tenders up to May 18th for the purchase of $10,000 5 per cent. town debentures.

BROCKVILLE, ONT.—The Canada Carriage Company are asking for tenders for erection of a three-storey building, cost $20,000.

TORONTON JUNCTION, ONT.—The Property Committee have provided in their estimates a new fire hall to cost $2,500.

SOUTH QU'APELLE, SASK.—The congregation of Knox Presbyterian church will build a new stone church, cost $3,000.

ST. THOMAS, ONT.—The congregation of St. John's church are discussing the erection of a new building on Flora street.

THESSALON, CNT—Clinton Bros. are preparing plans for a two-storey building for F. Fleron on the site of his present building.

GUELPH, ONT.—The Crowe Iron Works Co. are taking tenders for their new buildings between London road and Suffolk street.

NIAGARA FALLS, ONT. — Dr. Kellam will receive tenders up to May 16th for erection of his residence. W. Nichols, architect.

TILSONBURG, ONT.—A. E. Raynes, Town Clerk, will receive tenders up to May 12th for laying composition stone sidewalks in the town.

WESTON ONT.—Mrs. S. H. Rowntree will receive tenders up to May 10th for erection of a brick residence, corner King and North Station streets.

STURGEON FALLS, ONT.—DeMorest & Stull, architects, are preparing plans for Methodist church building, for which tenders will soon be called.

SASKATOON, SASK.—J. P. Hall, Willow City, N.D., will establish a soap factory here. — J. F. Cairns intends building a warehouse 40 x 100 feet.

CALGARY, ALTA. — The Government have purchased a site for Normal school building.—E. C. Perry, Minneapolis, will build a biscuit factory here.

BRACEBRIDGE, ONT. — The Ontario Government have appropriated $7,000 toward the construction of a steel bridge across the Muskoka river here.

DRESDEN, ONT.—Tenders will be received up to May 15th for erection of a building for the Canadian Bank of Commerce. Plans at Bank offices, Sarnia.

LANGHAM, SASK.—Tenders will be received up to May 12th for excavating cellars and building foundations for the Canadian Bank of Commerce building.

RADISSON, SASK.—Tenders will be received up to May 12th for excavating building foundations and vaults for Canadian Bank of Commerce building.

REXTON, N. B.—It is expected that a plant will be established here for the manufacture of tooth picks and hardwood novelties. G. F. Atkinson is interested.

CARMAN, MAN.—The Town Council gives notice of their intention to issue debentures for cost of electric lighting, waterworks, sewerage system and fire protection.

LYNEDOCH, ONT.—G. Jeffries will receive tenders up to May 12th for construction of a cement arch across Cranbrook creek between North Walsingham and Charlotteville.

PETERBORO, ONT.—E. M. Elliott, County Clerk, will receive tenders up to May 16th for erection of a House of Refuge near Lakefield. Plans with J. E. Belcher, architect.

WOLFVILLE, N.S. J. E. Smith will receive tenders up to May 15th for erection of an evaporating building at Port Williams station for the Valley Manufacturing Co. Plans at his office and with C. R. H. Star.

ST. MARY'S, ONT.—J. C. Widerhold, architect, will receive tenders up to May 10th for erection of a school at S.S. No. 3, West Zora.—H. McEvoy, architect, is preparing plans for the new Post Office building.

PENETANGUISHENE, ONT. — The plans of T. Kennedy, architect, Barrie, have been accepted for the new collegiate institute building. The same architect is preparing plans for a new public school building here.

WOODSTOCK, ONT.—J.O. Reume, Department of Public Works, Toronto, will receive tenders up to May 19th for the erection of two cottages, including heating, plumbing and electric wiring, in connection with the Hospital for Epileptics.

ST. CATHARINES, ONT. — J. Clench, County Clerk, will receive tenders up to May 10th for purchase of $10,000 5 per cent. debentures.—A by-law will be voted on May 14th to raise $15,000 for construction of cement sidewalks.

BRODHAGEN, ONT. — F. Jacob, Township Clerk, will receive tenders up to May 23rd for building cement abutments for four bridges in the township of Logan, also steel joisting and covering for bridges. Plans at the Clerk's office.

NEW WESTMINSTER, B.C. — The Canadian Mining & Smelting Co. are looking for a site here for a concentrator. J. P. Smith is interested.—The congregation of Queen's avenue Methodist church will improve their building, cost $2,500.

CHATHAM, ONT. — H. Lanigan will receive tenders up to May 18th for remodelling school house of S.S. No. 7, Chatham township. Plans with O'Keefe & Drew.—J. L. Wilson & Son, architects, have taken tenders for addition to residence on Baxter street.

HALIFAX, N. S.—J. J. Hopewell, Clerk of Works, is this week taking tenders for macadam pavement, also for erection of a stone building for cabmen's shelter.—The Council have approved of the purchase of a site on Brunswick street for a new High school building.

BARRIE, ONT.—The congregation of St. Mary's R.C. church purpose building an addition to their church.—A by-law will be voted on to raise $27,000 for improvements to electric light plant.—T. Kennedy, architect, is taking tenders for erection of a store and residence on Berzey street for J. H. Hambly.

SYDNEY, N.S.—J. J. Curry, City Clerk, will receive tenders up to May 17th for construction of bridges on Charlotte and Bentnick streets. Plans at office of City Engineer.—The congregation of the Sacred Heart have selected a site corner of Cottage road and Whitney avenue for a school building.

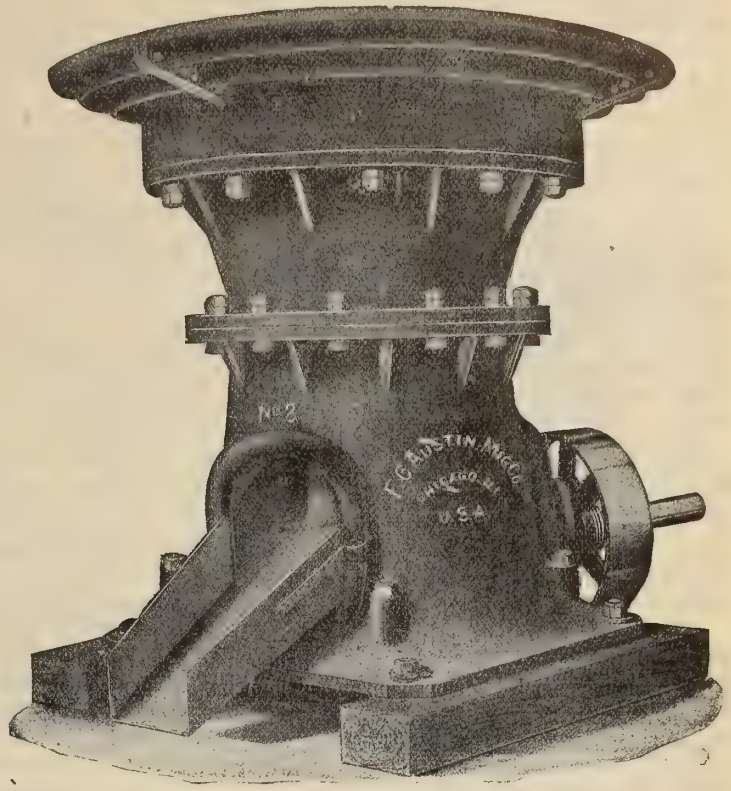
ORILLIA, ONT.—J. F. Morris will receive tenders up to June 1st for plumbing work of the new Y.M.C.A. building. Plans with Crocker & Hoy, architects.—The Town Council have adopted the plans of J. B. McRae for new concrete dam at Ragged Rapids, for which tenders will soon be called.

ST.ALEXIS, QUE.—Tenders will be received by the Secretary of the Department of Railways and Canals, Ottawa, Ont., for material and work in construction of crib work and grading, also moving of freight shed. Plans at station master's office here and with Engineer of Maintenance, Moncton, N.B.

REGINA, SASK.—The Saskachewan Hotel Co. have secured an option on a site for a proposed hotel building, cost $150,000.—F. E. Carver will receive tenders up to May 24th for erection of a brick and stone hotel on Hamilton street for Arnold Bros. & Acaster. Plans with W. M. Dodd, architect.

FORT WILLIAM, ONT. — The Griffin Company, Winnipeg, have completed arrangements for the erection of their cold storage plant on Hardisty street.—J. C. Stinson, architect, has taken tenders for erection of a dwelling for D. Smith.—J. R. Halton, architect,

Austin Gyratory Crushers



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Hoisting Engines, Derricks, Etc.

W.H.C. MUSSEN & CO.

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MONTREAL

will receive tenders up to May 10th for the erection of a residence for Flatt & McKenzie.

SOMERSET, MAN.—M. Landry will build a residence on Lachance street.—J. A. DeCosse will erect a new block to be occupied by the Northern Bank.—It is said that Dr. Rocan intends building a three-storey block on Front street.—The C.N.R. intends erecting a large station.—C. Galipeau and A. Labossiere intend building an elevator at Cardinals this summer.

MOOSE JAW, SASK. — Jones & Bunyard, architects, will receive tenders up to May 20th for erection of a residence on Langdon crescent for W. E. Seaborn.—J. Chisholm, architect, Winnipeg, will prepare plans for new Methodist church, cost $55,000. He is also preparing plans for store and apartment block on Portage avenue for Mr. Shipley.

EDMONTON, ALTA.—Building permits have been issued to W. H. Gardner for a store, office and apartment building on Second street, cost $3,000, and to J. A. McMillan for a residence on Boyle street, cost $2,500.—Plans for the new Government buildings have been completed, cost about $400,000.

LONDON, ONT.—H. C. McBride has taken tenders for erection of a brick block on Dundas street.—A. O. Graydon, City Engineer, has taken tenders for construction of sewers on Shoebottom and Picadilly streets.—Moore & Henry, architects, have taken tenders for erection of brick church on Richmond street north.

BANFF, ALTA.—P. G. Keyes, Secretary Department of Interior, Ottawa, will receive tenders up to May 26th for construction of a wood tank, 30 feet diameter, 24 feet high. Plans at above named office and with Superintendent of Rocky Mountains Park, this town, and John Galt, C.E., 23 Jordan street, Toronto.

QUEBEC, QUE.—F. Gelinas, Secretary Department of Public Works, Ottawa, will receive tenders up to May 28th for construction of an approach to the crib at St. Francois, Island of Orleans. Plans with above named and at offices of A. Decary, 5 du Fort street, C. Desjardins, Post Office building, Montreal, and with Postmaster at St. Francois.

HAMILTON, ONT. — W. A. Edwards, architect, has taken tenders for erection of a fire proof storehouse for the Sawyer-Massey Co.—S. H. Kent, Secretary, has taken tenders for additions to the Wentworth street school. Stewart & Witton, architects.—The following building permits have been issued: J. Radigan, brick factory on Ferguson avenue, $3,000; Thomas Lovejoy, brick house on Gibson avenue; T. E. McMillan, brick house on Wellington street.

MONTREAL, QUE.—The Provincial Light, Heat & Power Co. have taken tenders for power plant, including canal from the Soulanges canal to the river St. Lawrence, concrete dam, piers, power house and tail race.—The Eastern Townships Bank will erect a ten storey building corner of St. James street and Victoria square, cost of building and site about $500,000.—The City & District Savings Bank will erect a building at 1031 Ontario street, three stories, cost $30,000.—The Estate Beaudry will erect three stores on St. Catherine street, cost $30,000.—Building permits have been issued to the Montreal Rolling Mills Co. for a storehouse, cost $60,000, and to the Toilet Supply Co, for a building on Richmond street, cost $40,000.

BRANTFORD, ONT.—A sewer will be built on Duke street from West to Richmond street, also a branch from Duke to Crown street.—J. A. O'Connor will erect a brick dwelling on Palmerston avenue, cost $2,500.—A site on Colborne street has been secured for the new theatre building.—The Sand Lime Brick Company will establish a plant here on Mount Pleasant road, cost $40,000. W. D. Schultz is interested.—The congregation of Calvary Baptist church purpose erecting a new parsonage, cost about $3,000.

STRATFORD, ONT.—W. J. Ireland, architect, is preparing plans for the following buildings: Sunday school for Knox Presbyterian church, cost $18,000; office building for W. O'Benne, cost $10,000; large apartment house, $12,000; residence in Wellesley, for Mr. Heeb, $3,000; residence for J. M. Fraser; warehouse for William Richardson, $2,000; alterations to store of Duncan Ferguson Co., residence of C. H. Davies and residence of Miss Blair.—Building

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on the RANSOME SYSTEM. Cheaper than steel and brick, slightly higher than wood, and absolutely fireproof.

STEEL CONCRETE CO., LIMITED

MERCHANTS BANK BUILDING, MONTREAL.

permits have been granted to P. Gardner for a residence on Queen street and to Wet laufer Bros. for brick veneer office on Huron street.

VANCOUVER, B. C.—D. Burns has purchased a site on Pender street on which it is expected a two-storey building will be erected.—C.E. Fowler, of Seattle, has prepared plans for a bascule bridge for Westminster avenue, cost $150,000, and has also reported on a high level bridge across False creek at Granville street to cost $200,000.—A. F. Perry, 800 Burrard street, has had plans prepared for a four-storey building. W. T. Whiteway, architect, is preparing plans for an additional storey to the building of Kelly, Douglas & Co., Water street.—Residences will be erected on Beach avenue for W. Clubb, W. S. Latta and P. J. Chick. D. McDougall purposes erecting a residence on same street, cost $7,000.—W. T. Whiteway, architect, has taken tenders for the erection of a new Orange hall, corner Hastings street and Gore avenue.

WINNIPEG, MAN.—J. Chisholm, architect, has taken tenders for a stone and brick church building for the Young Methodist congregation.—The building of the new police station will begin at an early date.—H. B. Rugh, architect, will receive tenders up to May 10th for the erection of a residence on Wellington cresent for J. H. Guthrie.—V. M. Horwood, architect, has taken tenders for brick office and works building on Edmonton street for the Allward and McCormick Stained Glass Co.—G.G. Teeter, architect, is receiving tenders for erection of two frame houses on Walnut street for A. Edwards.—J. R. Hooper has purchased a residence on Broadway place on which he proposes making extensive alterations.—V. Barton, architect, has taken tenders for construction of a residential block on Sherbrooke street.—The Dominion Bridge Co. have purchased a site, lots 43 and 44 St James, on which

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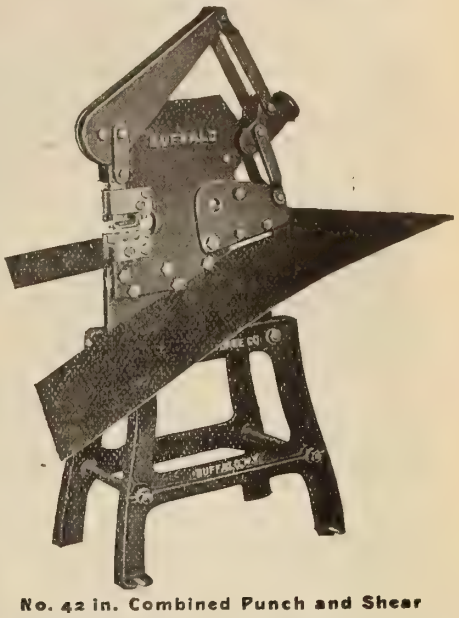

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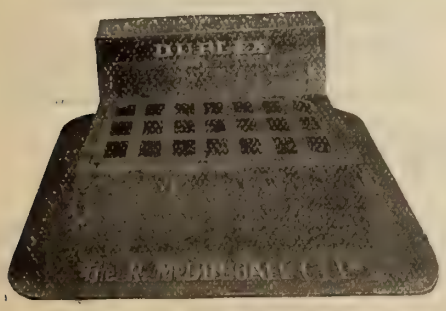

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they purpose erecting a large plant.—It is understood that a by-law will be submitted to purchase the gas plant and provide for extensions for the system at a cost of about $500,000.

TORONTO, ONT.—George Faulkner real estate agent, reports the sale of land near Port Credit to the Mississagua Golf Club, on which a fine club house will be erected.—J. Francis Brown, architect, is taking tenders for the following: Pair of houses on Maple avenue, residence and dental office, corner College and Laplant avenue, house on Nanton crescent and the remodelling and renovation to the Board of Trade building. He is also preparing plans for a five-storey building for the Toronto Engraving Co., corner of Adelaide and Duncan streets.—The City Architect and the Fire Chief have approved of the new factory to be erected on River street for the Stewart Hartshorn Shade Roller Co.—Plans have been prepared for the new Presbyterian church corner of Avenue Road and Roxborough street, cost $40,000.—Tenders are being taken at Room 26, 77 Victoria street, for brick and stonework for two houses on Dundonald avenue.—Tenders have been invited at 63 Givens street for erection of a pair of brick houses.—A. G. Strathy & Co., real estate brokers, have sold the Orpen property corner Bay and Queen streets on which it is expected a large building will be erected.—G. H. Gooderham has purchased a site corner Avenue road and St. Clair avenue for a residence. —The trustees of St. Michael's hospital have secured property adjacent to their present building on which an addition will be built.—F.S. Baker, architect, will receive tenders up to May 15th for erection of a branch bank building, corner Bloor and Yonge streets, for the Traders' Bank.—Tenders will be received by the Board of Control up to May 22nd for one 40 h. p. boiler, one 35 h. p. steam engine, one 34 ft. elevator and one revolving screen. Specifications at office of City Engineer.—The Imperial Paper Box Co. have purchased the property at 485 King street west and intend making extensive alterations in the building.—The Bowser Co. have purchased a site on Fraser avenue for a factory for the manufacture of gasoline tanks.—It is understood that the G. T. R. have secured a site near the Queen street station for freight sheds.—S. G. Curry, architect, is preparing plans for the restoration of the post office.—It is expected that tenders will soon be called for clearing the site for the new Union station. The plans for the building are well advanced.—Plans have been prepared for a new building for Alpha and Zeta Masonic Lodges, Parkdale, cost $10,000.—The following new pavements have been recommended by the City Engineer: Asphalt—Walmer road, from Castle avenue to Bloor, $9,277; Birch avenue, from Yonge to west end, $7,593; Dovercourt road, from Bloor to north city limit, $24,686; Melville avenue, from Christie to Miles' Place, $3,952; Balmoral avenue, from Avenue road to east city limits, $3,703; McMurrich street, from Davenport road to Belmont street, $5,041; Mullock avenue, from Church to east end, $1,555; Ulster street, from Bathurst to Manning avenue, $6,284; Berkeley street, from King to Queen, $8,912. Cedar block—Pendrith avenue, from Christie to a point 508 feet west, $2,010. Bitulithic —Palmerston avenue, from Follis avenue to north city limits, $12,338; Laurier avenue, from Wellesley street to north end, $1,556. Vitrified block — Front street, from Sherbourne to Trinity, $25,-103; Berkeley street, from King to Esplanade, $10,123. Vitrified brick — Front street, from west side of George street to east side of Sherbourne street, $8,631. Granite block—Lane, 1st east of Simcoe street, from Wellington to a

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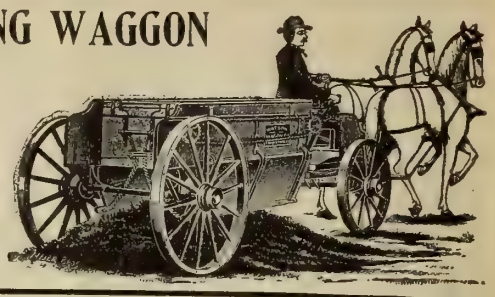

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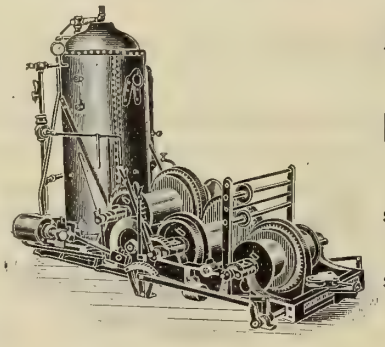

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point 305 feet south, $2,403. Brick—Gerrard street, from Pape to Leslie, $17,454.—The following sewers have been recommended: Gore Vale avenue, from Queen to Arthur, $3,760; Parkway ave., from College to Dundas, $1,860; Guelph avenue, from Carlow avenue to Pape, $1,350.—Building permits have been issued as follows: W. Bulmer, two 2-storey stone and brick dwellings, Havelock street, cost $4,800; A. E. Scythes, pair 2-storey brick dwellings, Margueretta street, cost $4,500; D. H. Atkinson, four 2-storey brick and stone dwellings 103-109 Pearson ave., cost $8,000; Elgie & Page, 2½-storey brick dwelling, 102 St. George street, cost $11,000; Rev. L. Minehan, 1-storey brick and stone church, corner Bloor and Markham streets, cost $27,000; P. J. Landeryou, 2-storey brick dwelling, Westmoreland avenue, near Hallam street, cost $5,000; Chas. A. Grant, pair 2½-storey brick dwellings, Pape avenue, near Brighton, cost $4,400.

CONTRACTS AWARDED.

INGERSOLL, ONT.—Merchants Bank building: Nagle & Mills, contractors, cost $20,000.

PRINCE ALBERT, SASK.—Residence on Central avenue for Dr. Holmes: A. Holmes, contractor.

MOOSE JAW, SASK.—Construction of new dam across the Moose Jaw river: J.W. Ferguson, contractor.

VANCOUVER, B.C.—New Japanese school on Alexander street: Dowse & Carver, contractors, $5,500.

ROSTHERN, SASK.—$5,000 5½ per cent. school debentures: J. W. Nay, Regina, purchaser, $5,257.

L'ORIGINAL, ONT.—The House of Refuge for Counties of Prescott and Russell: Will be built by day labor.

KENORA, ONT. — Development of water power at outlet of Lake of the Woods: Kelly Bros. & Co., contractors.

ORILLIA, ONT.—Residence on Coldwater street for Dr. A.P. Ardagh: Brick work, E. Webb; carpenter work, Pomeroy & Co.

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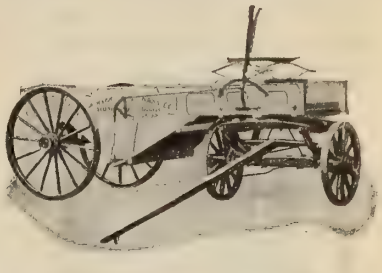

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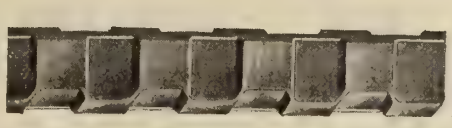

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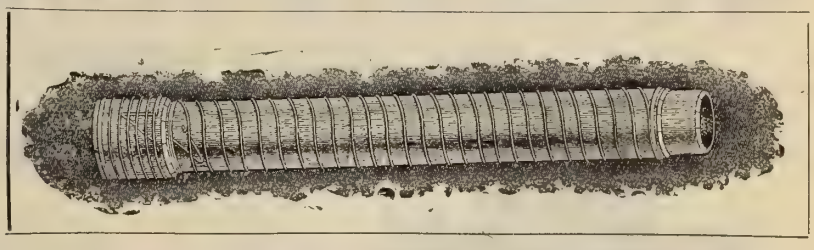

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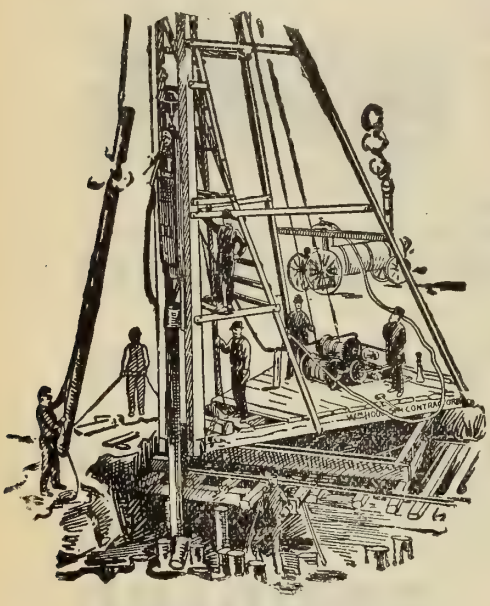

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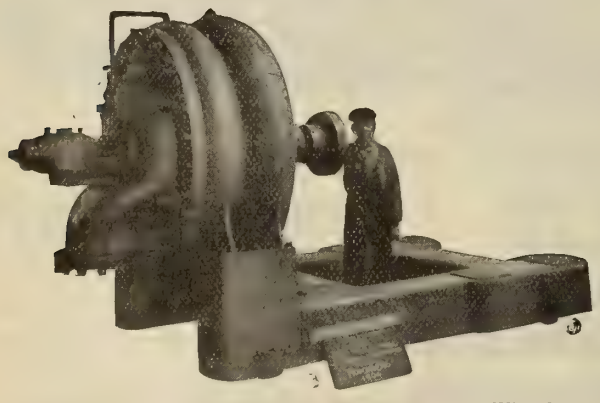

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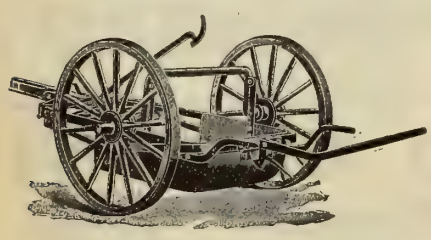

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							Neat.					3 (Sand) to 1 (Cement)				
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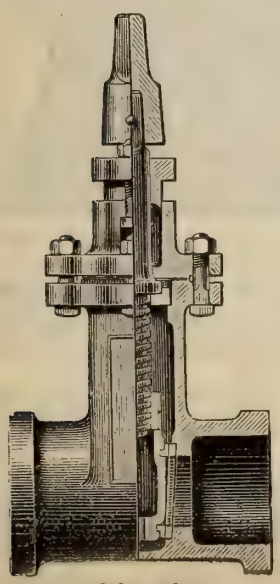

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SASKATOON, SASK. — Block on Second avenue for J. F. Cairns: Neil Stewart, Regina, successful tenderer, $36,500.

KINGSTON, ONT.—McCoy & Wilfrid, contractors, have taken contract at Sudbury to lay 40 miles of the James Bay railway.

BLAIRMORE, ALTA. — Stone block for Lethbridge Brewing & Malting Co.: Building, Mr. Fraser, contractor; mason work, E. Moreno.

LONDON, ONT.—German Evangelical church, corner Wellington and Gray streets: Mason and carpenter work, Forest City Paving Co.; painting and glazing, Mossop & Co.

FORT WILLIAM, ONT.—New High school building: Building, Hamilton & Fregeau; heating and plumbing; Fort William Hardware Co.; electric wiring, Hiners & Fielder.—Addition to business block for Ruth'edge & Jackson: F. Cusson, contractor, cost $3,500.

TORONTO, ONT.—Addition to residence of S. J. Moore, King street and Jameson avenue: Masonry, Davidge & Lunn; carpenter work, George Henry. J. Francis Brown, architect.—Residence on Broadview avenue for Dr. Cleland: Masonry, Jones Bros.; carpenter work, D. Walton. J. Francis Brown, architect.

WINNIPEG, MAN.—The Fire, Water & Light Committee have recommended the acceptance of the following tenders for supplies: Lead pipe, Robertson & Co., $7,750.50; cast iron goods, Northern Iron Works, $784; cast iron posts, Canadian General Electric Co.; galvanized wire rope and guy wire, R.E.T. Pringle Co.; 3,000 pounds No. 6 copper wire, J.A. Dawson & Co.; steel name plates, H.T. Stovell Co. at $17; 10,000 pounds Hercules Portland cement, Gray & Bruce Portland Cement Co., 74.57 cents per pound.—The Health Committee have recommended the acceptance of the following tenders for the erection of a Quarantine Hospital: Excavation, masonry, plastering and brick work, R.T. Farley, $4,246.35; carpenter work, Nixon & McGuire, $4,755.50; plumbing and heating, J.L. Wells, $1,566.96; Painting and glazing, Bell & Co., $850.

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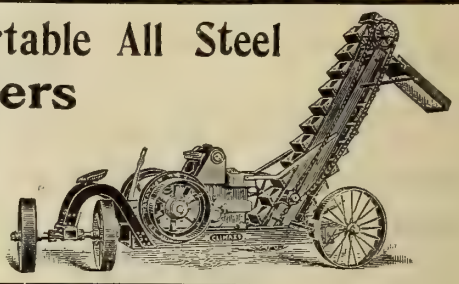
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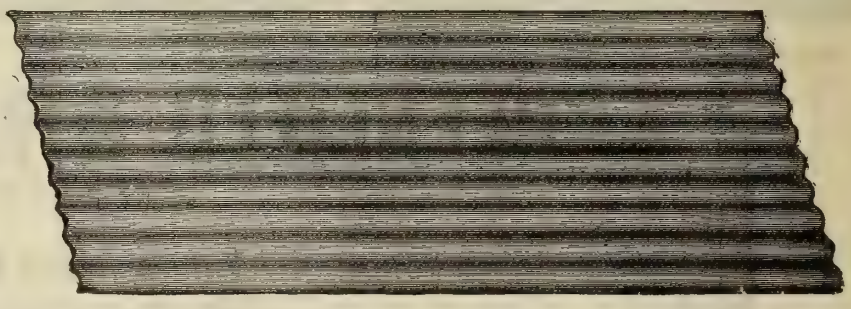
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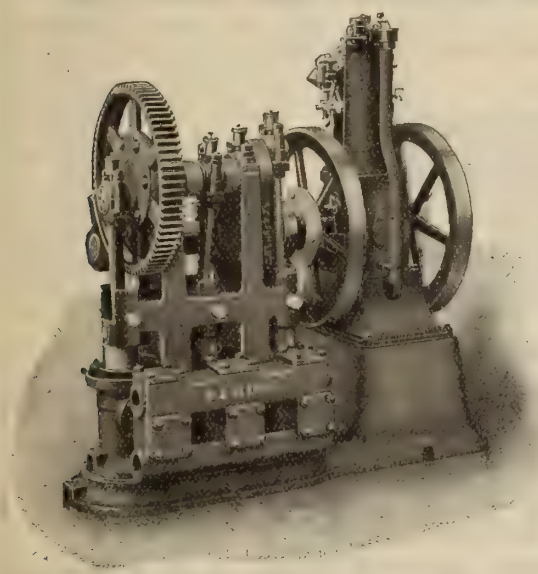

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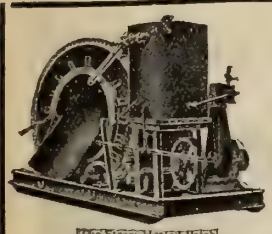

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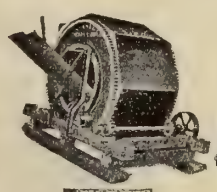

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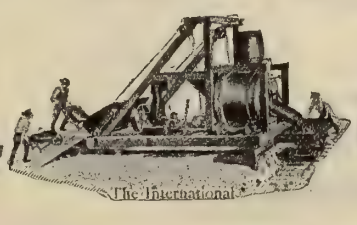

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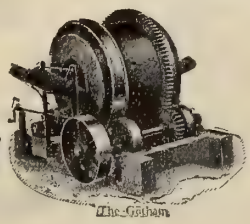

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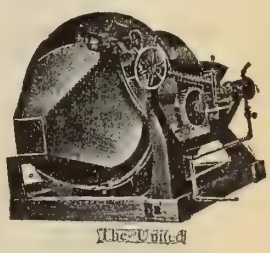

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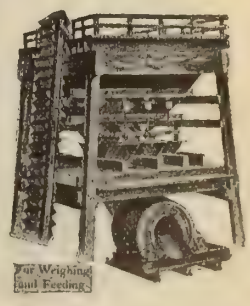

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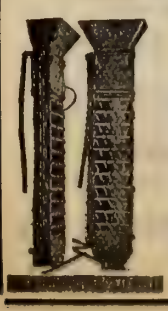

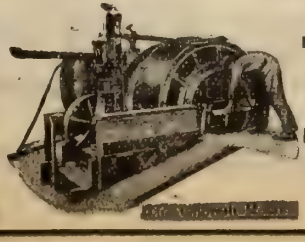

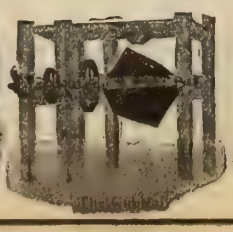

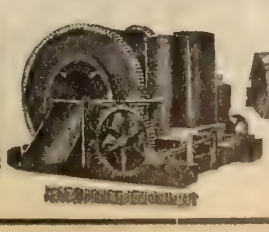

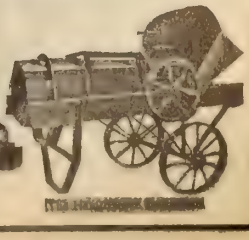

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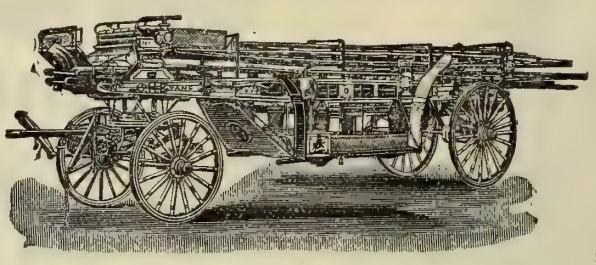

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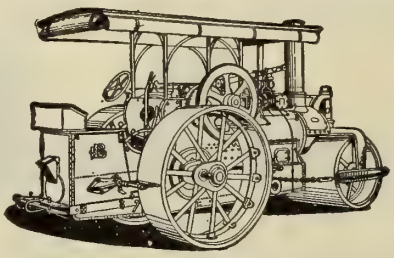

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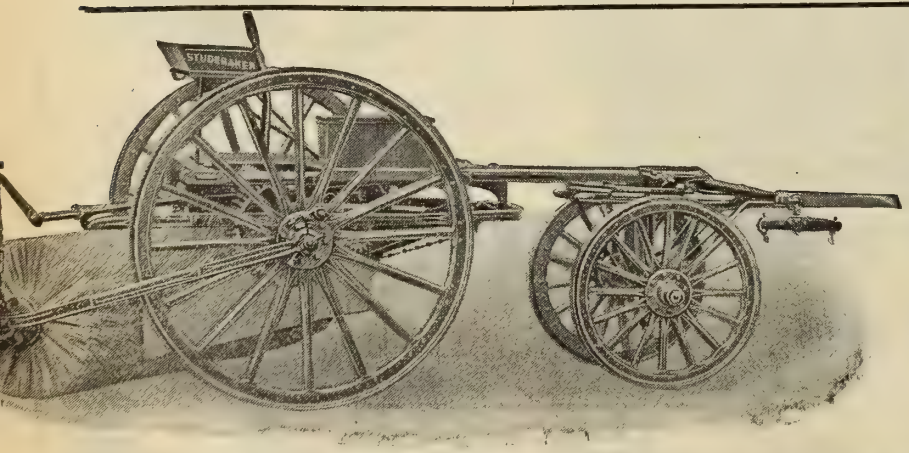

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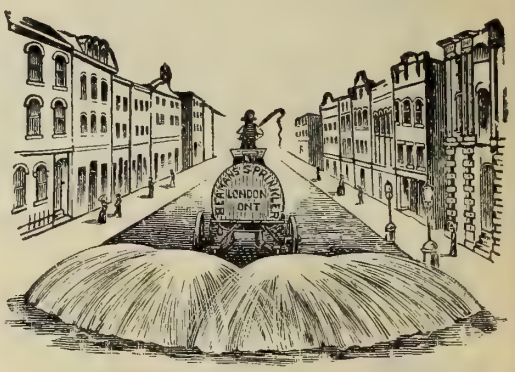

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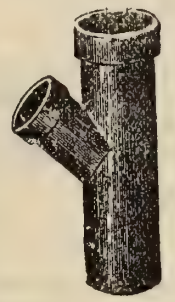

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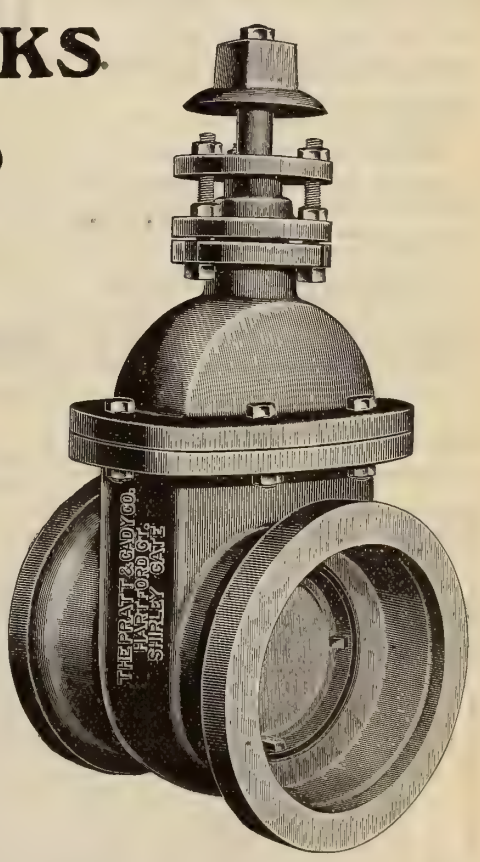

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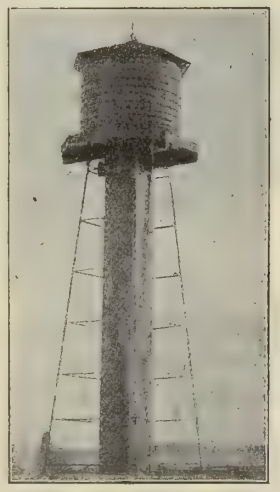

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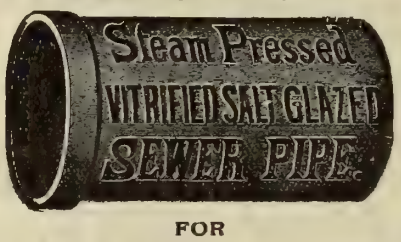

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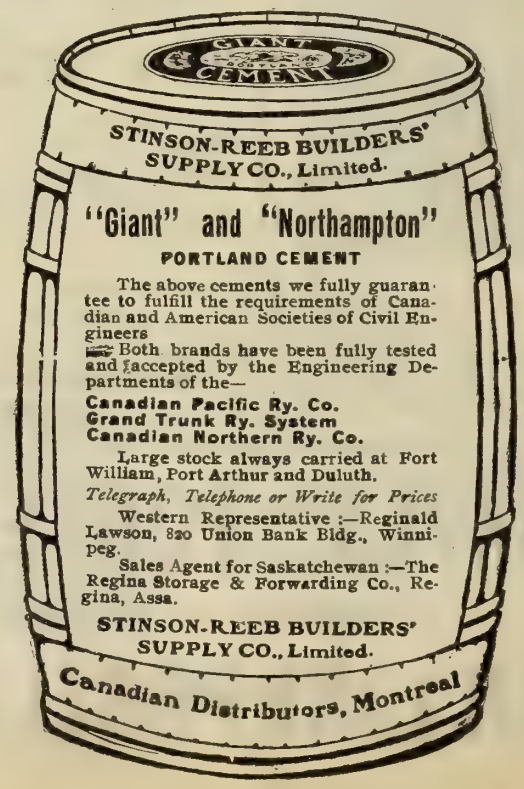

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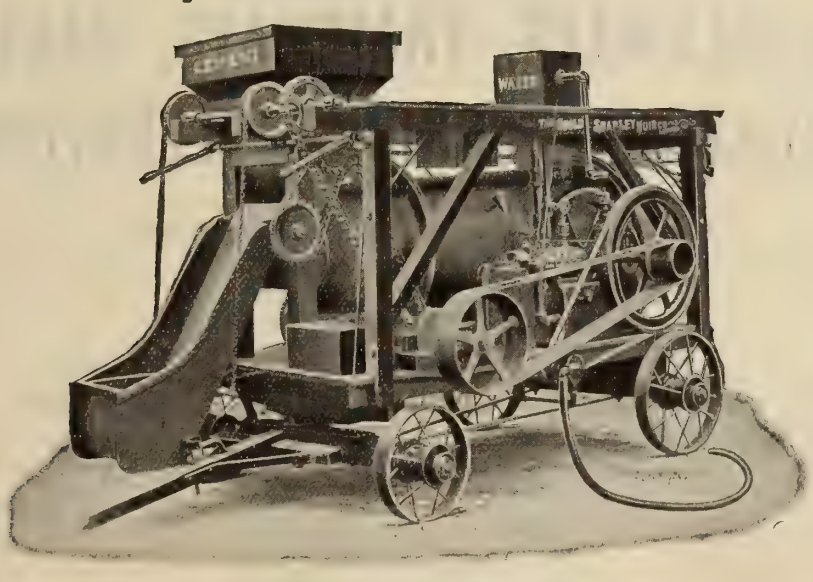

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VOL. 17. TORONTO, MONTREAL — MAY 16, 1906 — WINNIPEG, VANCOUVER No. 11

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Any other information can be obtained from the Architects.

C. W. TURNER, Secretary,
Campbellford, Ont.

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Specifications may be seen at the office of the Town Clerk, St. Stephen, N. B., or at the office of the CANADIAN CONTRACT RECORD, Montreal.

All bids must be accompanied by a certified check for Five Hundred Dollars ($500.00), and security in the amount of Five Thousand Dollars ($5,000.00) will be required for the faithful performance of the contract.

The Town reserves the right to reject any or all bids.

J. VROOM,
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St. Stephen, N. B., April 16, 1906.

TOWN OF ST. STEPHEN WATERWORKS.

Sealed proposals for construction of waterworks will be received until 8 p.m. of FRIDAY, MAY 25TH, at the Town Council room, St. Stephen, N. B. Work includes collecting well, laying pipe 10 inch and 14 inch, twenty-two thousand feet, and concrete distributing reservoir. Specifications can be obtained and plans seen at the office of the Town Clerk or the office of the Engineer.

F. A. BARBOUR,
Engineer,
Boston, Mass.

J. VROOM,
Town Clerk,
St. Stephen, N.B.

CITY OF BRANDON

Tenders for

CAST IRON PIPE AND HYDRANTS

Sealed tenders will be received by the City of Brandon until 12 o'clock noon on MONDAY, JUNE 18TH, 1906, for furnishing the following supplies:

150 Ton of 6 inch C.I. Pipe and Specials;
15 Hydrants.

Specifications and conditions of tendering may be obtained on application to the undersigned

The lowest or any tender not necessarily accepted.

W. H. SHILLINGLAW,
City Engineer.

Brandon, Man., May 10th, 1906.

Tenders For Debentures

City of St. John, New Brunswick

Tenders, addressed Treasury Department, City of Saint John, Province of New Brunswick, and marked "Tenders for Debentures", will be received by the undersigned, up to 12 o'clock noon, on the TWENTY-EIGHTH DAY OF JUNE, 1906, for the purchase of Seven Hundred and Twenty-One Thousand ($721,000) Dollars "Saint John City Debentures", to be issued by the City of Saint John, payable at the expiration of forty years, with interest at four (4) per cent. per annum, payable half yearly, from the first day of May, 1906. Principal and interest may be payable at Chamberlain's office, in Saint John, New Brunswick, or in Great Britain or elsewhere.

The Debentures may be expressed in sterling money of Great Britain, in currency of Dominion of Canada, or in the currency of any Foreign Country, and in sums not less than Five Hundred Dollars each as purchaser may desire.

Resolutions passed by the Common Council of the City of Saint John provide for the formation of a Sinking Fund for the redemption of these Debentures at maturity.

Parties tendering must state in their tender in what currency, in what sums and where they desire the Debentures and Interest to be made payable.

The highest or any tender not necessarily accepted.

By order of the Treasury Department of Common Council.

HERBERT E. WARDROPER,
Common Clerk,
City of Saint John, N. B.

Prospectus in connection with above loan may be obtained on application.

Tenders for Cement Sidewalks

Sealed tenders will be received at the Town Clerk's Office, Whitby, up to MONDAY, 28TH MAY, 1906, for the construction of 10,000 feet or more of Cement Walks in the Town of Whitby.

R. RICHARDSON,
Chairman on Streets.

Tenders for Electric Generators, Etc.

Sealed tenders addressed to Ald. J. C. Gibson, chairman of Fire, Water and Light Committee, for supply of two 500 horse-power Electric Generators, Switchboards, etc., for High Pressure Fire Service Waterworks, will be received at the office of the undersigned up to 3.30 p. m. on

MONDAY, JUNE 4, 1906

Specifications and forms of tender may be obtained on application to H. N. Ruttan, City Engineer, Winnipeg, Canada.

Each tender must be accompanied by an accepted cheque or draft payable to the order of the City Treasurer, or cash deposit for the sum called for in the form of tender supplied, which will be subject to forfeiture in case of failure on the part of the contractor to enter into a written contract, with approved sureties, if called upon to do so.

The city reserves the right to reject any or all tenders, or to accept any bid which appears advantageous to the city of Winnipeg.

C. J. BROWN,
City Clerk.

City Clerk's Office,
Winnipeg, May 9, 1906.

Tenders Wanted

Sealed tenders will be received by the undersigned or by James Donaldson, Esq., County Commissioner for Perth, Allwood, Ont. until 5 o'clock p.m. of SATURDAY, THE 2ND DAY OF JUNE, 1906, for the erection of Two Steel Bridges on the boundary between Grey and Elma Townships about six miles from Listowel on the G.T.R.

No. 1 is to be a Warren Truss of one span, 40 feet clear between abutments.

No. 2 is to be a Pratt Truss of one span 52 feet clear between abutments 8 feet high of 4 panels.

Both bridges are to have 7" joists at 2' centres. Roadways 14 feet wide, railing 4' high of 4 tiers of 1½" gas pipe, concrete floors and wheel guards. Required strength 125 pounds per per square foot of floor surface, with a good safety factor. About 10 feet from bed of stream to floors. Bridge No. 1 is to be completed on or before August 11th, 1906. Bridge No. 2 is to be completed on or before August 25th, 1906.

Tenders to be accompanied by marked cheque equal to 10% of contract price and payable to the Treasurer of Huron County. Cheques will be forfeited should any contractor fail to enter into satisfactory agreement for due fulfilment of contract.

The deposits of unsuccessful tenderers will be returned.

Lowest or any tender not necessarily accepted.

JOHN ANSLEY,
County Commissioner for Huron County,
Wingham, Ont.

Wingham, Ont., May 10, 1906.

[FOR ADDITIONAL ADVERTISEMENTS FOR TENDERS SEE NEXT PAGE.]

WANTED AT ONCE

FOR CITY OF EDMONTON

A first-class Draftsman, for sewer, street and water-works plans.

A good level man, for grades, sewers, profiles, etc.

Inspector for cement sewers, sidewalks, etc.

Inspector for telephone installation.

Six young men with technical knowledge, to act as foremen, inspectors, and general work, where they could work into desirable positions.

Also wanted, a telephone man, one who could take charge of remodelling and installing, and then to operate same, fine opening for right man.

The City owns all its municipal plants, and there are fine openings for ambitious young men. Address at once with references to

CITY ENGINEER,
Edmonton, Alta.

City of Moose Jaw, Sask.

TENDERS

Sealed tenders will be received at the office of the City Clerk up till 5 p m on MONDAY, THE 28TH. MAY, for the following Fire Apparatus and Street Sprinkler.

1. Hose wagon. Capacity of 600 ft. and 800 ft.
2. Hook and ladder and trucks built for two horses.
3. One street sprinkler 600 gals. capacity for two horses.

The City reserve the right to reject any or all tenders.

JOHN D. SIMPSON,
Secretary-Treasurer.

Moose Jaw, 8th May, 1906.

City of Fredericton, New Brunswick.

Bids will be received at the offices of the City Clerk until WEDNESDAY, THE 23RD DAY OF MAY, 1906, at eight o'clock in the evening, for improvements in the City Water Works, including the following contracts:

1. For the construction of concrete and brick work in clear well, filter tanks, filter building and extension of pumping station.

2. For the equipment of a complete Mechanical Filter Plant.

3. For duplicate Low Lift Centrifugal Pumps and Direct Connected Engines.

4. For High Duty Pumps.

Deposit cheques certified will be required with each bill.

Bids must be made on blank forms of proposal to be furnished. Plans may be seen and specifications and bidding papers obtained at the offices of the City Clerk, Fredericton, or of the Engineer, Boston.

The City reserves the right to reject any or all bids or to accept any bid.

J. W. McCREADY, City Clerk,
Fredericton, N. B.

F. A. BARBOUR, Consulting Engineer,
Tremont Building, Boston, Mass.

Dated April 24th, A. D. 1906.

TENDERS FOR

Drainage Works

The Corporation of the Township of Cavan will receive sealed tenders marked "Tender for Drainage Works," and addressed to John J. Fair, Millbrook P. O., up to noon of SATURDAY, 26TH MAY, 1906, for the construction of Drainage Works a distance of about seven miles through the Townships of Cavan and North Monaghan, according to plans and specifications made by John E. Belcher, Engineer, which may be seen at the office of John J. Fair, Township Clerk, Millbrook.

Each tender must be accompanied by an accepted cheque drawn upon any chartered bank in Canada, payable to the order of "The Treasurer of the Township of Cavan," for the sum of $500, or in lieu thereof a cash deposit of said amount, which will be subject to forfeiture in the event of failure on the part of the Contractor to enter into a satisfactory written contract when notified to do so.

The contractor whose tender is accepted will be required to furnish a bond for $2,000 satisfactory to the Township Council, and the Contractor will also be required to enter into a special covenant not to unnecessarily interfere with or endanger public traffic on the township highways during the construction of the works.

The Township Council reserve the right to reject any or all tenders or to accept any bid which may appear advantageous to the Township of Cavan.

JOHN J. FAIR, Township Clerk,
Millbrook, Ont.

Dated at Millbrook this 24th April, 1906.

Tenders for

Strengthening Swing Bridges

At Chatham for C. W. & L. E. R'y.

Sealed tenders will be received up to WEDNESDAY, MAY 23RD, by John S. Fielding, C. E., Consulting Enigneer, 15 Toronto Street, for Strengthening of Swing Bridge at Chatham. Plans and specifications at above address, to which tenders are to be sent.

Tenders Wanted

$10,000 Debenture Bonds For Sale

Tenders will be received up to JUNE 1ST, 1906, for the purchase of Electric Light Debentures of the Town of Picton, in amount $10,000. Full particulars furnished on application. Address

R. A. NORMAN,
Clerk Town of Picton.

TENDERS WANTED

Tenders will be received by the undersigned up to 4 p.m. of the 22ND DAY OF MAY, 1906, for the building of a High School at the Town of Wingham.

Plans and specifications can be seen at Henry Simpson's office, 17 Toronto Street, Toronto, and at the Secretary's office, Wingham, Ont.

DUDLEY HOLMES,
Secretary.

CEMENT WANTED

Tenders will be received by the undersigned up till noon, MONDAY, MAY 21ST. 1906, for about 1000 barrels of cement to be delivered f o.b. in Barrie in car lots as required during the season.

The lowest or any tender not necessarily accepted.

E. DONNELL, Town Clerk,
Barrie, Ont.

Barrie, May 7th, 1906.

TENDERS

Sealed and marked tenders will be received by the undersigned until 6 p. m. on SATURDAY, MAY 26TH, 1906, for the building of a two-roomed brick veneer School House 34 by 38 feet on a stone foundation 9 ft. 6 in. high on the school site, Stoughton, Sask Trustees furnish stone and sand.

Building must be completed by September 1st, 1906, and contractor will be required to give bonds. Lowest or any tender not necessarily accepted. Plans and specifications may be seen at Massey-Harris Office, Stoughton.

E. R. CORNELL,
Chairman School Board,
New Hope, S. D., No. 691,
Stoughton, Sask.

NOTICE TO CONTRACTORS

Sealed tenders, marked "Tenders for Bridges" and addressed to the undersigned Engineer, will be received up to 12 o'clock, noon, of MONDAY, THE 8TH DAY OF JUNE, A. D., 1906, f r the furnishing of materials for and construction of:

(a) Two cement concrete bridge abutments with wing walls consisting of about 125 cubic yards, 1, 3, 5 mixture.
About 250 yards of excavation.
(b) 400 cubic yards of earth grading.
70 cubic yards of gravel and broken stone grading.
c) 150 square feet of rip-rap wall 18 inches thick.
825 square feet of rip-rap wall 2 feet thick.
(d) 116 lineal feet of 5 foot plank walk with railings requiring 520 feet of 1½ inch gas pipe.
2,000 pounds of cast iron posts and all necessary plank and cedar sills.

Said works to be built at Winchester Springs in the County of Dundas and Province of Ontario.

Plans and specifications may be seen at the office of the undersigned.

A certified cheque, payable to the Treasurer of the United Counties of Stormont, Dundas and Glengarry, for 5 per cent. of the amount of the tender, must accompany each bid.

The lowest or any tender not necessarily accepted.

Tenders may be submitted on any or all of the four parts mentioned above.

THOS. H. DUNN,
Engineer in Charge,
Winchester, Ont.

EDWARD WALSH
Chairman of Committee, Dunbar, Ont.

Winchester, May 14th, 1906.

TENDERS

The undersigned will receive "Sealed Tenders" marked "Tenders for Concrete Walks" up to seven o'clock p.m. on the 31ST DAY OF MAY, 1906, for the construction of a quantity of Concrete Walks which the Municipal Council of the Town of Smith's Falls intends to construct during 1906.

An accepted cheque of $100.00 must accompany each tender as a guarantee of good faith.

Specifications and all further available information may be had on application to F. F. Code, Town Engineer.

The lowest or any tender not necessarily accepted.

J. A. LEWIS, Town Clerk,
Smith's Falls, Ont.

CONTRACTS OPEN.

HUMBER BAY, ONT.—E. Wood intends erecting a new hotel here.

PORT HOPE, ONT.—J. Caldwell will build a residence on King street.

STONEWALL, MAN.—Col. Goldsbury will erect a residence this summer.

AYLMER, ONT.—The town is considering the rebuilding of the town hall.

BOISSEVAIN, MAN. — The Imperial Oil Co. will erect a large warehouse here.

MACLEOD, ALTA.—The town is considering the installation of a water system here.

ST. STEPHEN, N.B.—G. W. Daniel intends building a residence on Prince William street.

NEW LISKEARD, ONT. — Subscriptions are being received for the new hospital building.

SARABVILLE, MAN.—A by-law will be voted on June 2nd, to raise $4,000 for new school building.

CARDSTON, ALTA. — The Legislature have appropriated $10,000 for a Court House building.

HINTONBURG, ONT.—The School Board have decided to rebuild the school building at an early date.

OAK RIVER, MAN.—A by-law has been carried to raise $10,000 for erection of new school building here.

CHAUDIERE, QUE.—The Quebec Central Railway purpose building workshops and a round house here.

WALKERTON, ONT.—The Hospital Board are considering building an extension to their present building.

NANAIMO, B.C. — The congregation of St. Paul's church are considering the erection of a new building.

QU'APPELLE, SASK.—J. B. Beauchamp & Co. intend building a two-storey brick block 75 x 100 feet.

WEST TREHERNE, MAN. — A by-law will be voted on May 26th to raise $18,000 for school building.

REGINA, SASK.—A. W. Melville, architect, Winnipeg, will prepare plans for the new fire hall, cost $20,000.

HAMIOTA, MAN.—A by-law has been carried to build a school in Municipality of Blanshard, cost $10,000.

KINGSTON, ONT.—A by-law will be voted on May 31st to raise $85,000 for extensions to the lighting plant.

CRANBROOK, B.C.—H. Y. Parker, resident engineer, has taken tenders for enlarging Moyie tunnel for the C.P.R.

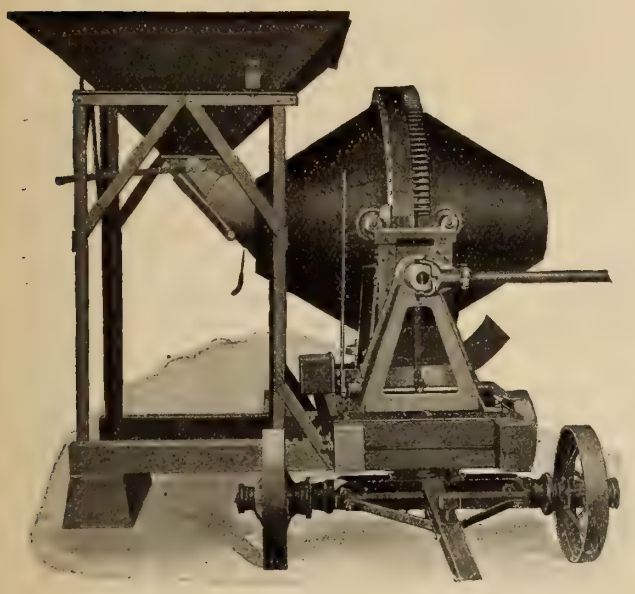
CHATHAM, ONT.—The Dominion Bank have purchased a site on King street on which a bank will be erected.

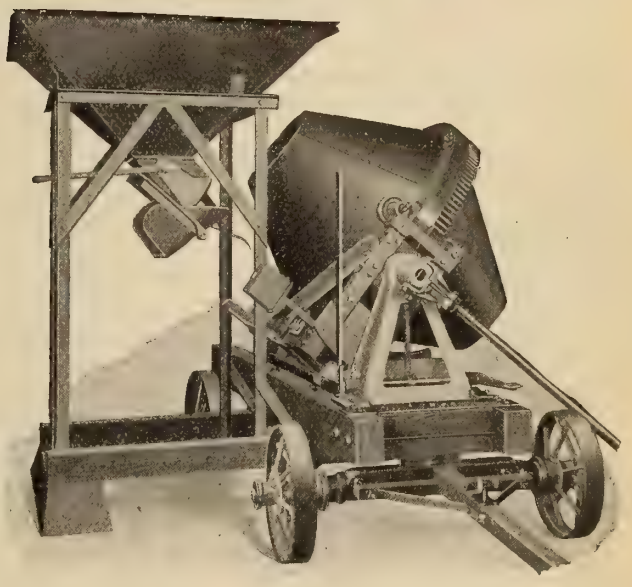
BRAMPTON, ONT.—The Council will accept the offer of $10,000 from Andrew Carnegie for a public library.

GUELPH, ONT.—The congregation of Trinity Baptist church are considering the erection of a house for their pastor.

PRESTON, ONT.—R. Ruddy and L. Wildfong will build residences on Dover

COMPLETE CONCRETE MIXING PLANTS





SMITH CONCRETE MIXER

Equipped With Patent Batch Feeding Hopper

Austin Rock Crushers, Contractors' Dump Wagons,

Bucyrus Steam Shovels

Hand Cars

Light Rails — Push Cars

Track Tools — Dump Cars

W. H. C. MUSSEN & CO.

Railway, Mining, Municipal and Contractors' Supplies

MONTREAL

street.—Granolithic sidewalks will be built on several streets.

GLENCOE, ONT.—A by-law will be voted on to guarantee a loan for the building of a factory for knitted goods.

PORT ELGIN, ONT. — Stevens, Hepner & Co. are considering the erection of a brush factory, 3 stories, 185 x 55 feet.

KEMPTVILLE, ONT.—The directors of the Agricultural Society have decided to enlarge the Exhibition buildings.

CARBERRY, MAN.—R. A. Garland, Town Clerk, will receive tenders up to May 21st for construction of cement walks.

ARCOLA, SASK.—C. R. Young will receive tenders up to May 20th for erection of a brick block for the Merchants' Bank.

ST. BONIFACE, MAN. — T. Bertrand has taken tenders for construction of granolithic sidewalks on Eugenia street.

GRANDVIEW, MAN.—F. R. Evans, architect, Winnipeg, has prepared plans for a new school building here, cost $10,000.

CHATHAM, ONT.—A by-law will be voted on May 21st to loan $75,000 to the Keystone Sugar Co. for establishing a plant here.

CHESLEY, ONT.—The Town Council have engaged John Galt, C. E., of Toronto, to report on the cost of a waterworks system.

PORTAGE LA PRAIRIE, MAN.—The School Board are considering improvements in the Collegiate building, cost $15,000.

LUNENBURG, N.S.—The Board of Managers of the Presbyterian church are considering the remodelling of their present building.

REGINA, SASK.—The City Council have adopted a plan for paving and granolithic sidewalks on several streets, cost $400,000.

PORT HOPE, ONT.—The Central Foundry Company expect to establish a plant here in the Radiator buildings, which will be remodelled.

HUNTSVILLE, ONT.—McNairney & Kehoe, proprietors of the Dominion Hotel, have decided to erect a large addition to their present building.

BELLEVILLE, ONT.—It is understood that the plans for the new armouries are being prepared and that the foundations will be built this summer.

WEYBURN, SASK.—The plans of Hutchison & Nobles, architects, Regina, for new public school building have been accepted and tenders will soon be called.

NIAGARA FALLS, ONT. — The plans of Architect Hicks for the new hospital building have been approved by the Provincial Department of Public Works.

ROGERSVILLE, N.B.—C. H. LaBillois, Department of Public Works, Fredericton, has taken tenders for rebuilding Henry Burke's bridge over Bay du Vin river.

YELLOW GRASS, SASK. — It is understood that the Bank of Commerce will erect a new building. A residence will be erected for Mr. Hamley, manager, on Souris street.

WINGHAM, ONT.—D. Holmes will receive tenders up to May 22nd for building a High school here. Plans at his office and with H. Simpson, architect, 17 Toronto street, Toronto.

HALIFAX, N. S.—Tenders will be received by F. Gelinas, Department of Public Works, Ottawa, Ont., up to May 17th for construction of a passenger elevator at the Custom's House.

YORTON, SASK.—The Union Bank will erect a three-storey building corner of Broadway and Third avenue.—The School Board purpose erecting a new school in the west end this summer.

PRINCE ALBERT, SASK. — The Salvation Army will erect a stone and brick barracks on River street.—Dr. P. A. Holmes will erect a drug store corner Central avenue and Second street.

BRANTFORD, ONT.—Miss Campbell will erect a brick dwelling on West street, cost $2,500.—The plans for the new building of the Golf Club have been prepared and it is expected that building will soon begin.

MEDICINE HAT, ALTA.—W. T Morrison, City Engineer, will receive tenders up to May 19th for supply of 1,500 barrels of cement.—W.T. Williams, architect, has taken tenders for the erection of a brick morgue.

NICOLET, QUE.—F. Gelinas, Department of Public Works, Ottawa, will receive tenders up to May 26th for construction of post office building here. Plans with the above named and with Postmaster here.

FORT FRANCIS, ONT. — James Armstrong will erect three houses on Second street.—W. Floyd will build two residences on Armit and Nelson streets. —It is expected that a new C.N.R. station will be built.

AMHERST, N.S.—E. E. Hewson will receive tenders up to May 18th for erection of a stone and brick church.—The Two Barkers, Limited, have taken tenders for erection of a brick and stone building on Victoria street.

BRIDGEWATER, N.S.—S Cook will erect a double house on Prince street.—Mr. Lamb expects to build two houses on the Tupper property.—Mrs. L. Slocumb intends building two houses.—The Lutheran congregation will erect a church.

PICTON, ONT.—The trustees of the Baptist Mission are having plans prepared for a new church building, corner King and Elizabeth streets.—R. A. Norman, Town Clerk, will receive tenders up to June 1st for purchase of $10,000 electric light debentures.

QUEBEC, QUE.—The Quebec Central Railway have been authorized by the English Board of Directors to build a branch line from Scott's Junction to the new Quebec bridge. The company propose moving their central offices from Sherbrooke to this city.

RED DEER, ALTA.—A new Methodist church is to be built here, cost $30,000.—An eight-roomed school building is proposed to be erected.—E. Mitchner expects to build a business block costing $8,000, and a residence costing $2,500.— The Great West Saw Mill Company will erect a mill this summer, cost $40,000.—The C.P.R. will erect a roundhouse here.

TORONTO JUNCTION, ONT. — The following building permits have been issued: T. P. Wright, two-storey brick house, Pacific avenue, $3,000; John Bingham, two-storey and attic brick house, Pacific avenue, $2,000; J. McEwan, one-storey store, brick veneer, Willoughby avenue, $1,000; S. Hopper, two-storey and attic brick house, Medland street, $2,500; W. J. Sheppard, two-storey brick store and dwelling, Dundas street, $2,500.

BERLIN, ONT.—V. F. Webber will receive tenders up to May 21st for construction of a reinforced concrete bridge on Queen street south. Plans with Davis & Johnson.—By-laws have been carried to increase the electric light system cost $55,000, for extension of sewer system cost $13,000, and fire hose, etc., cost $3,000.—Tenders will soon be called for erection of new opera house.

MOOSE JAW, SASK.—The Moose Jaw Brewing & Malting Co. purpose erecting a brick brewery, cost $75,000.—The Board of Works have included granolithic pavements in their estimates, cost $25,000, also sewer and waterworks extensions, cost $440,000.—Darling & Pearson, architects, Winnipeg, will receive tenders up to May 19th for erection of a building for the Canadian Bank of Commerce.

EDMONTON, ALTA. — Building permits have been issued as follows: W. A. Logan, residence on McKay avenue, cost $4,500; W. A. Allen, residence on 15th street, cost $2,500; M. Fortier, residence on Clair avenue; McDougall & Secord, warehouse on Jasper avenue, cost $1,400; Mrs. E. W. Pargetier, dwelling 13th street, cost $2,500; J. Whitelaw, dwelling on 6th street.—The C.P.R. have secured a site on 11th street west for freight shed.

MONTREAL, QUE.—J. H. Blumenthal & sons have purchased property corner of St. Catharine and Bleury streets for a new store building.—The Road Department gives notice of its intention to construct sewers on the following streets: Joliette street, from Forsyth to Hochelaga; Brebouef street, from Laurier ave. northward; Logan street, from end of existing sewer westward to Fullum street.

LONDON, ONT.—W. G. Murray, architect, will receive tenders up to May 19th for alterations and additions to Empress avenue Methodist church, West London.—A. O. Graydon, City Engineer, is receiving tenders this week for work on the Fish market building.—The Windsor, Chatham & London Railway are seeking charter to build a line from Windsor to this city.—G. H. O'Neill has purchased the Tecumseh house and will have it improved.

PETERBORO, ONT. — The Canadian General Electric Co. will make extensive additions to their works here, cost between $300,000 and $400,000.—It is expected that a Canadian branch of the American firm manufacturing appliances for automatic telephone systems will be located here.—The plans for the new carpet factory will soon be completed and tenders called.—The congregation of All Saints' church are considering the erection of a new building.

FREDERICTON, N.B.—C. H. LaBillois, Department of Public Works, will receive tenders up to May 28th for rebuilding Birch Island bridge over Buctouche river and to June 4th for metal superstructure of 80 feet. Plans at above named office.—C. H. LaBillois, Department of Public Works, will receive tenders up to June 4th for constructing the metal sub-structure of Graveyard bridge. Plans at his office.—The I.C.R. intend erecting steel bridges at Penniac, Doaktown and Boiestown during the coming summer.—The residence of W. T. Whitehead, M.P.P., Church street, is to be remodelled this summer.

BRANDON, MAN. — The Empire Hotel is to be remodelled this season.—The Great West Power & Machinery Co. purpose establishing large works here, cost about $250,000. — Building permits have been issued as follows: J. C. B. Tucker, brick veneer warehouse, 12th street, $4,500; Massey-Harris warehouse, Pacific avenue, $6,500; Gillespie Lumber Co., house, 15th street, $5,000; T. L. Orchard, brick block, 3rd street, $12,000; A. H. Bewell, brick house, 13th street, $8,500; Burchill & Howey, brick and stone block, Rosser avenue, $5,000; Brandon Creamery Co., brick and stone building, Rosser avenue, $15,000; J. McDonald, brick veneer house, 11th street, $6,500.

STRATFORD, ONT.—Some local capitalists propose establishing a large

departmental store adjoining W. J. Ney's premises.—Building permits have been issued as follows: John McCaffrey, brick veneer residences, Queen street; D. and T. Smith, 2 brick residences, Albert street; D. and T. Smith, 1 brick residence, Worsley street; D. and T. Smith, 1 brick veneer residence, Erie street; George Levett, brick residence, Nile street; T. B. Johnson, brick residence, Elizabeth street; J. F. Scholtz, brick whip factory, Erie street; W. McCully, brick creamery on Erie street; J. J. Birmingham, brick veneer residence, Caledonia street; Wm. Racey, brick veneer residence, Nelson street; J. M. Lillow, McKenzie-st., brick veneer residence, McKenzie street.

VANCOUVER, B.C.—G. A. Barrat & Co. have taken tenders for erection of a brick and stone block for John Crane. —F. W. Huntting Lumber Co. have plans prepared for a new saw mill on Bridge street, cost $75,000.—T. A. Fee will erect a building corner Smithe and Granville streets, cost $22,000.—W. T. Whiteway, architect, has the plans completed for the new market building.—The following building permits have been issued: F. C. Cotton, brick and stone building, Pender and Hamilton streets, cost $35,000; fly gallery of C.P.R. opera house, $11,000; P. Burns & Co., stables, Pender street, cost $22,000; S. Sing, dwelling, Second avenue, $1,500.

HAMILTON, ONT.—The plans of Stewart & Witton, architects, for the new armories have been approved by the Government and it is expected that tenders will soon be called.—T. W. Watkins will extend his building back to the Times building.—The Burns Estate have decided to enlarge the Waldorf Hotel, cost $35,000.—The G. T. R. have decided to build a bridge at Ferrie street.—Tenders will be received by the Fowlers Canadian Company sor erection of an abattoir and storage plant.—S. A. Kent, City Clerk, will receive tenders up to 22nd inst. for 2,000 feet of 2-1/2 inch 3 ply fabric rubber lined hose.—Fraser & Randall, real estate brokers, have sold a site on Charles street to the new Automobile Co., on which a garage will be erected. The same dealers have sold the property 148 to 152 South John street which will be remodelled.

OTTAWA, ONT.—The site of the Davidson Mills on Spark street has been secured for the new theatre building.—The H. B. Martin Co., Baltimore, have been looking for a site for erection of an abattoir. — The Oddfellows are taking steps towards the erection of a new hall. —F. Gelinas, Department of Public Works, will receive tenders up to May 22nd for dredging at Batiscan river and river St. Francis.—Plans are being prepared for the new Y.M.C.A. building to be erected corner of Metcalf street and Laurier avenue.—Building permits have been issued as follows: Miss Radford, double tenement, brick veneered, James street, $3,300; George Ambridge, brick veneered dwelling, Gladstone avenue, $3,600; J. H. Reiffenstein, brick veneered dwelling, Daly avenue, $3,400; Rideau Lumber Company, alterations to office, Mackenzie avenue, $2,500; W. E. Houghton, double house, solid brick, Hartington place, $8,000; A. A. Fournier, brick shop, Wellington street, $14,000; Alex. Chamberlin, brick veneer dwelling, Cartier street, $4,500; J. C. Brennan, solid brick building, corner Queen and Bank streets; R. J. Devlin, addition to shop, Sparks street, $2,500; J. Moore, brick veneer dwelling, Archibald street, $1,500; F. Bissonette, brick veneer dwelling, Archibald street, $2,500.

FORT WILLIAM, ONT. — The Light and Water Commissioners have taken tenders for construction of a central substation, corner of Donald and Vicars streets.—Rutledge & Jackson will build a brick addition to their building, cost $3,500.—W. J. Ross will build

SAND and SLAG

For Roadbuilding, Sewer Construction, Concrete Foundations and Footings is our specialty.

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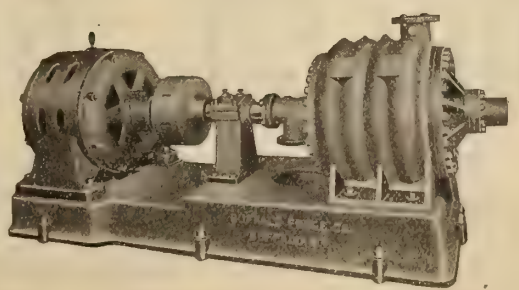
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a brick block, cost $9,000.—T. Hanley, architect, has prepared plans for a residence on Bay street for G. Otto, cost $4,000 ; residence for F. Hugli, cost $2,500 ; residence for C. Sherry, cost $2,500.—N. N. Jorpland has plans prepared for a brick residence, cost $6,000. —Plans have been prepared for a large double house for J. W. Bryan.—C. W. Wheeler, architect, has prepared plans for a house on Waverley street for Dr. Laurie, cost $6,000.—L. A. Andrews has plans prepared for a new residence on Prospect avenue, cost $2,800.

WINNIPEG, MAN.—F. R. Evans, architect, will receive tenders up to May 17th for addition to residence of T. H. Oxley, 363 Young street, also for addition to residence on Pacific avenue east.—A Duluth firm have purchased a site, corner of Portage and Hargrave avenues, for large office building —F. Gelinas, Department of Public Works, Ottawa, Ont., will receive tenders up to May 18th for construction of an elevator at the new Immigration building.—The Men's Own Institute purpose erecting a new building to cost $30,000.—The Dominion Theatre expect to make large additions to their present building this year.—The Y. M. C. A. societies of the different colleges of the city are planning to erect a building for their use.—The Manitoba Frost Wire Fence Co. purpose building a factory 70 × 109 feet on Nena street.—The Fire, Water & Light Committee will receive plans from architects for fire hall building in Ward 7, cost about $16,000. They will also receive tenders up to June 4th for two 500 horse power electric generators, switchboards, etc., for fire service waterworks. Plans with Col. Ruttan.—D. Smith, architect, will receive tenders up to 19th inst. for construction of a warehouse for the Codville-Georgeson Co.—The School Board are calling for tenders for addition to the Aberdeen school, cost $18,000.— Robert McAlpine, Glasgow, Scotland, has purchased a site corner of Main street and Portage avenue for a large office building.—A. R. McNichol will build additions to the Stobart block on Portage avenue this summer.—C. W. M. Kennedy is having plans prepared for a large building on Portage avenue.—T. Kelly and J. Maw are preparing to erect a building on Garry street.—Mrs. Hample has plans prepared for three-storey store and office building on Portage avenue.—Mr. Shipley will erect a store and apartment block on Portage avenue. —Aikens & Muttleberry are having plans prepared for a block of stores on Portage avenue.—J. B. Brown has purchased a site on McMillan street for a dwelling.

TORONTO, ONT. — Gordon and Helliwell, architects, will receive tenders up to May 18th for erection of a house in Rosedale.—W. H. Guest has applied for permission to establish a wood pulling factory at 1 to 7 Laing street. — The Board of Education recommend a new technical school building to be erected, cost $250,000.—The Board of Control will receive tenders up to May 22nd for construction of asphalt pavement on Bay street from King to Queen and on Queen street from Yonge to River, for granite block track allowances on Richmond, Victoria, Scott and Wellington streets, also for a number of concrete sidewalks. Plans at office of City Engineer. They will also receive tenders up to June 5th for pumps and electrical equipment required for the system of sewerage east of Woodbine avenue. Plans with City Engineer.—Dr. Orr, manager of the Industrial Exhibition, is negotiating with the C.N.R., G.T.R. and C.P.R. to have a large union railway building erected at the Exhibition grounds.—The plans of Wickson, Gregg & Chapman, architects, have been accepted for the Carnegie library building, of classic design, in Grecian architecture, gray stone and brick, cost about $260,000.— Director Stupart, of the Observatory, has approved of a site corner Bloor street and Devonshire place for the new Observatory building,—Father Canning, of St. Joseph's church, has purchased a site corner First avenue and De Grassi street for a Roman Catholic church building.—It is said that the G.T.R. intend constructing freight sheds at the foot of Jefferson avenue.—J. O'Neil & Co. have purchased the Harry Webb Restaurant building which they will remodel into a hotel building, cost $75,000.—It is said that property corner Laing and Eastern avenues has been purchased by a Glove Manufacturing Co. who will soon begin building.—Building

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permits have been issued as follows: R. Walker, 2-storey brick store, College street, near Ossington avenue, cost $3,500; F. C. Beecroft, 2½-storey stone and brick dwelling, Roxborough street west, near Yonge, cost $4,600; A. Norman, pair 2½-storey brick dwellings, Walker avenue, cost $6,500; J. McKerracher, 2-storey brick dwelling, Woodlawn avenue, near Yonge street, cost $5,000; H. Horsman, 2-storey brick dwelling, Scarth road, cost $7,000; Geo. Bell, pair 2-storey brick dwellings, 147-149 Jones avenue, cost $3,600; H. Galbraith, pair 2½-storey brick dwellings, 246-8 Beatrice street, cost $5,400; M. E. Baldwin, 2½-storey brick dwelling, Dovercourt road, near Bloor street, cost $3,300; W. Nash, four 2½-storey brick dwellings, Gore Vale avenue, cost $10,000; W. Nash, pair 2½-storey brick dwellings, Grace street, cost $5,000; W. A. McTaggart, two 2-storey and attic brick dwellings, 818-820 Dovercourt road, cost $5,000; M. S. Bogart, 2-storey and attic brick dwelling, St. George street, near Lowther avenue, cost $12,000; J. Brierley, 2-storey and attic brick dwelling, 100 Givens street, cost $5,000; Reliance Loan Co., 4-storey brick offices, alterations, 84-88 King street east, cost $20,000; W. B. Armstrong, 2-storey brick dwelling, 116 Brooklyn avenue, cost $2,200; Mrs. J. Grafton, two 2½-storey brick dwellings, Poplar Plains road, cost $6,600; A. Hutson, 2-storey and attic brick dwelling, Rusholme road, cost $5,800; Slemins & Eaton, pair 2-storey and attic brick dwellings, Grace street near Arthur, cost $5,000; E. M. Hooper, 6-storey brick hotel extensions, Corner Front and Simcoe streets, cost $34,000; A. J. Toldgam, 2-storey brick dwelling, Montrose avenue, near College street, cost $2,600; J. Singer, pair 2-storey brick dwelling, Crawford street, near Bloor, cost $5,000; W. C. Lambert, 2½-storey brick dwelling, Indian road, cost $3,000; E. Gardner, three 2-storey and attic brick dwellings, Ulster street, near Euclid avenue, cost $6,750; Mrs. H. Hutson, four 2-storey and attic brick dwellings, Dewson street, cost $11,500; J. Orr, pair 2-storey and attic brick dwellings, Grace street, near

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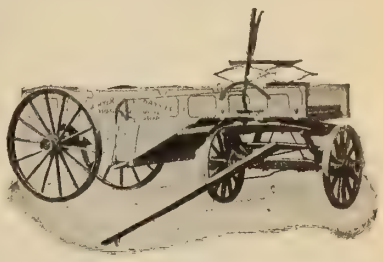

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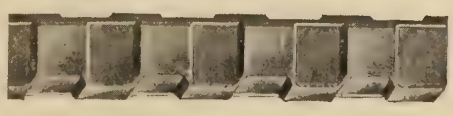

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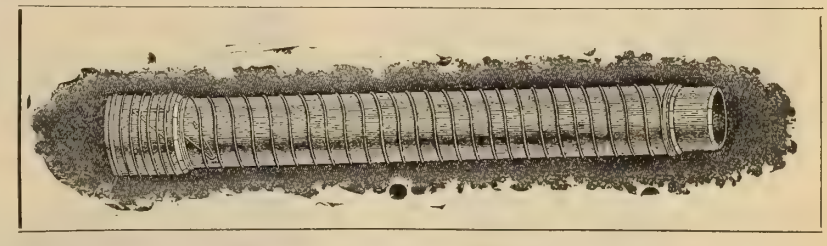

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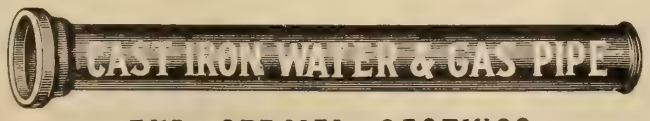

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College, cost $5,000; Mrs. Angus Prentice, 2-1/2-storey brick dwellng, Bathurst street, near Harbord, cost $3,000, Mrs. Hardy, brick alterations to dwelling, 47 Gloucester street, cost $2,000; H. C. Hann, 2-1/2-storey brick dwelling, Palmerston boulevard, near Harbord street, cost $4,600; Jas. V. Clark, three 2-storey brick dwellings, Brunswick avenue, near Bloor street, cost $8,000; F. Saunders, four 2-storey brick dwellings, 322-328 Concord avenue, cost $9,000; R. A. Graydon, 2½-story stone and brick dwelling, corner Lowther and Madison avenue, cost $3,000; R. Burkell, pair 2-story brick dwellings, Beatrice street, near College, cost $5,000; Gingras & Brown, pair 2½-story brick dwellings, Huxley street, cost $4,000; Dr. G. S. Cleland, 2-story brick dwelling, Broadview avenue, near First, cost $9,000; S. J. Moore, 2-story brick dwelling, corner Jameson avenue and King street, cost $8,000; J. W. Butchart, two 2-story brick and stone dwellings, Barritt avenue, cost $5,000; The Haven, 4-story brick home, 320 Seaton street, cost $9,000; Coleman & Early, two 2-story and attic brick dwellings, Dundonald street, near Church, cost $7,000; Mrs. M. A. Carrick, pair 2-story brick dwellings, Mutual street, near Wilton avenue, cost $6,000; King Bros., pair 2-story and attic brick dwellings, Roxborough street, near Crescent road, cost $7,000; Standard Bolt & Screw Company, Ltd., brick factory, Sterling road, cost $5,000.

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COMBER, ONT.—The Pettypiece Silex Stone Co. have the contract to construct Silex walks here.

GUELPH, ONT.—Addition to factory of Taylor Forbes Co.,: Hamilton Bridge Works, contractors.

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AURORA, ONT.—Steel tower and tank for water works: Ontario Wind, Engine & Pump Co., Toronto, contractors, $3,300.

BRANTFORD, ONT. — Additions to the plant of the Cockshutt Plough Co.: Secord & Son, contractors, cost about $23,000.

NORTH TORONTO, ONT. — Residence for R. Drury, corner of Balliol and Yonge streets: Fisher & Ramsay, contractors.

SYDNEY, N.S. — Buildings for the Harris Abattoir Co. of Toronto: Chappell Bros. & Co. Ltd. Sydney, N.S. contractors.

KIRKFIELD ONT.—Phillips & Co., Orillia, have secured the contract for plumbing and heating of William McKenzie's house, cost $3,500.

WELLAND, ONT. — Construction of ten inch water maih from Division street to M.C.R. station: J.H. McKnight, Toronto, successful tenderer.

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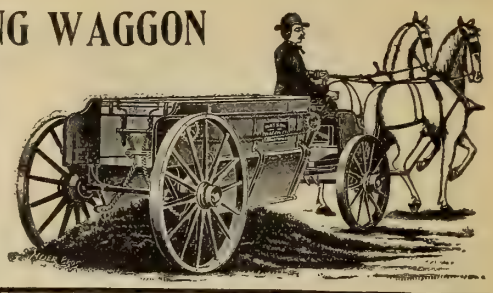

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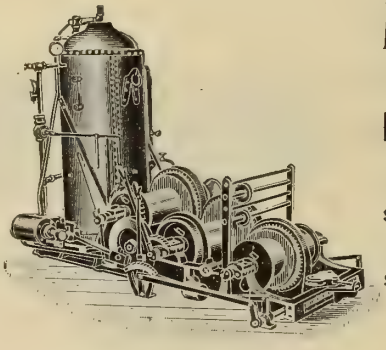

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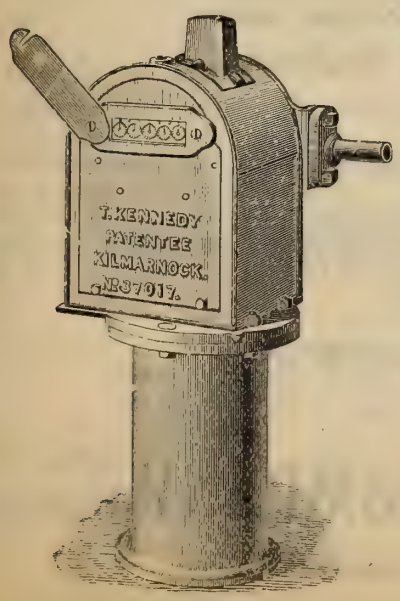

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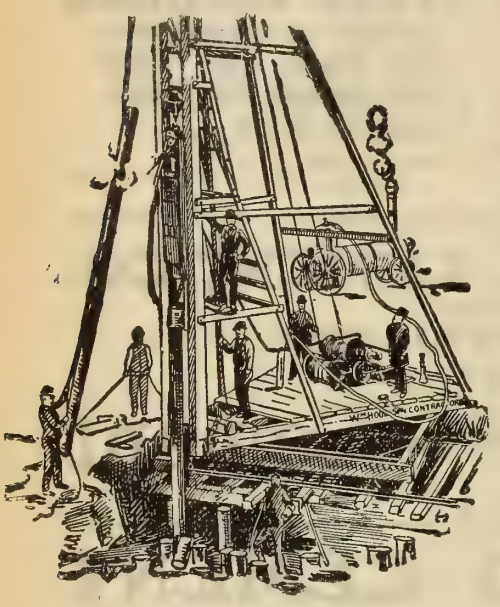

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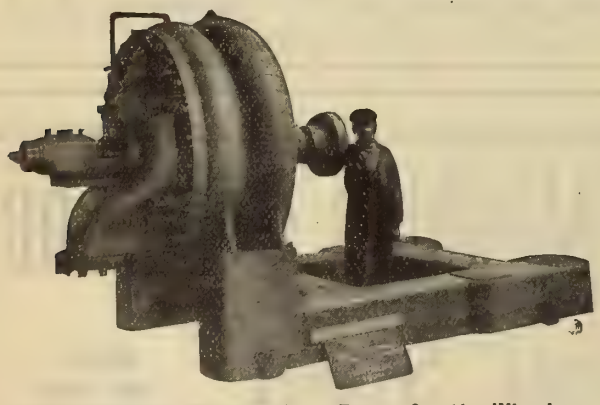

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AMHERSTBURG, ONT.—The Pettypiece Silex Stone Co., of this town, have been awarded the contract for constructing a large amount of Silex side walks and street crossings here.

BRANDON, MAN.—$60,000 local improvement debentures: W. C. Brent, Toronto, purchaser, at $60,103.35.—Supply of cement: Owen Sound Sampson Brand at $2.92 per barrel.

PETERBORO, ONT. — New Public school building: Building, Rutherford Bros., $25,000; heating and plumbing, McGregor & Reid, $4,260; electric wiring, Alexander & Miller, $139.75.

CALGARY, MAN.—Electric lighting plant: Engines and boilers, Goldie & McCullough, $5,574; generator, Canadian Westinghouse Electrical Co., $3,265; pole line and wiring, Electrical Construction & Maintenance Co., $3,389.

TORONTO, ONT.—Concrete work on piers at Queen's wharf: Arnold & Co., Thorold, successful tenderers. — The Board of Control have awarded the following contracts for asphalt pavements: Constructing & Paving Co., Yonge street from College to Bloor, $14,875, Birch avenue, from Yonge to west end, $5,179; Barber Company, Yonge street from Queen to College, $15,100, Richmond street from Jarvis to Church, $6,170.

WINNIPEG, MAN. — Warehouse for James Porter & Co., corner Bannatyne and Rorie streets: Masonry, Hindson & Davidson; carpentering, McCoombe & McKay; plumbing and heating, John Plaxton & Co.; galvanized iron work, John Wallace; painting, R. Crawford.—Residence of William Bell, Riverview: Carpentry, Nelson & Tyson; plastering and mason work, Brynjolfson & Son; galvanized iron work, S. Drew; plumbing, Northern Heating Co.; electrical work, J.I. Gordon; painting and glazing, R. Crawford. -- Nurses Home for General Hospital: William Grace Co., contractors, $60,000.

OTTAWA, ONT.—The following contracts for dredging have been let by the Dominion Government: Fesserton, Owen Sound Dredging & Construction Co.; Goderich, W.L. Horton, Goderich; Meaford and Trenton, R. Weddell, J.J. Manley and R.G. Wedell, Trenton; Owen Sound, A.T. Bowman, Southampton; Penetanguishene, Owen Sonnd Dredging & Construction Co.; Point Edward, Dominion Dredging & Construction Co., Ottawa; Port Burwell and Port Stanley, Manley Co., Toronto; River Thames and Rondeau C.S. Boone Toronto; Port Arthur, Messrs. R. Weddell, M. McAuliffe, N.J. Poupore and Randolph Macdonald; Fort William, Mission and Kaministiquia Rivers, Great Lakes Dredging Co., Limited.

INDIAN HEAD, SASK.—Installation of waterworks system: Wood pipe line and water distribution system, labor, Fry & Masterton Regina, $20,554; sewerage system, labor, Whiteman & Pike, of Edmonton, $11,929.55; dam and reservoir, labor. W. Newman, Regina, $7,476; wooden water pipe and specials, Canadian Pipe Co., Vancouver, $20,629 40; cast iron water pipe and specials, Canada Foundry Co., Toronto, $12,610.30; hydrants and valves, Canadian Fairbanks Co., Winnipeg, $2,041.59; vitrified tile pipe, McComb Sewer Pipe Co., $8,332.78; manhole covers and catch basins, T. Tomlinson Bros., $1,617.50; underwriter fire pump, Canada Foundry Co., $1,640.

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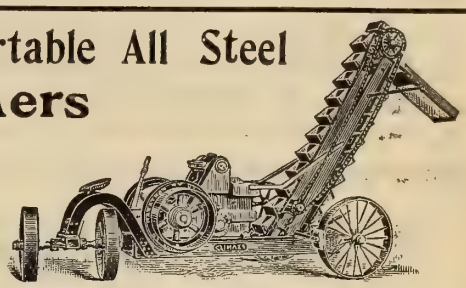

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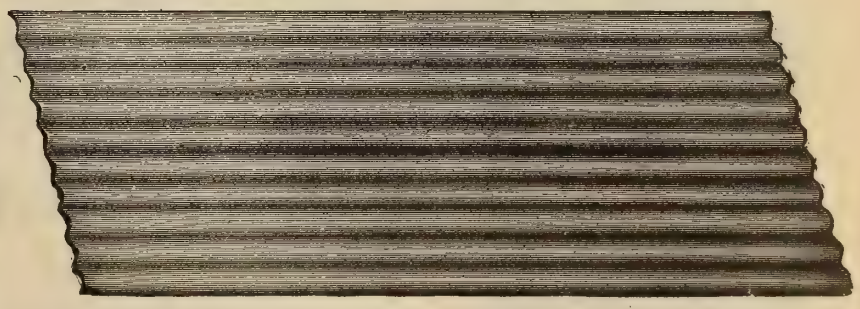

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under which the company will operate. Robert A. Ross, the secretary-treasurer, who with Mr. Holgate comprises the firm of Ross & Holgate, consulting engineers, is an authority in all matters relating to electrical engineering. J.A. Aylmer, C.E., the fifth member of the Board of Directors, has been identified with many large railway and canal constructions.

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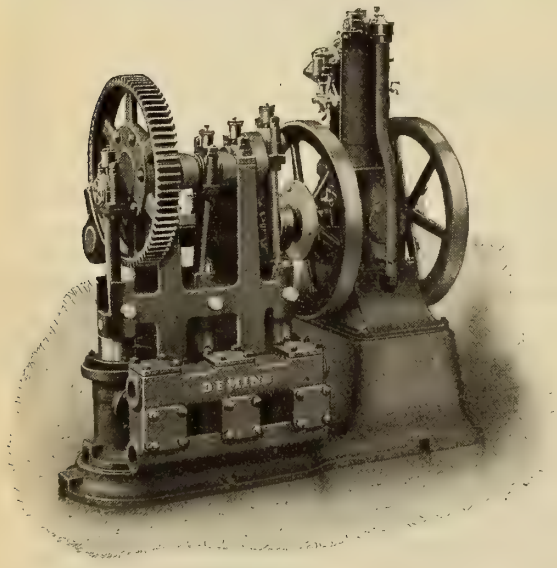

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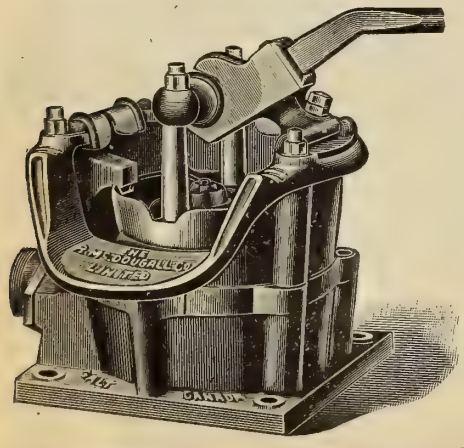

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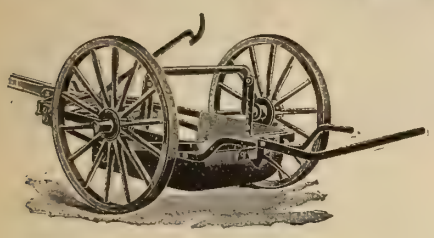

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							Neat.					3 (Sand) to 1 (Cement)				
					Initial	Final	1 dy.	7 dys.	28 dys.	3 mos.	1 yr.	1 dy.	7 dys.	28 dys.	3 mos.	1 yr.
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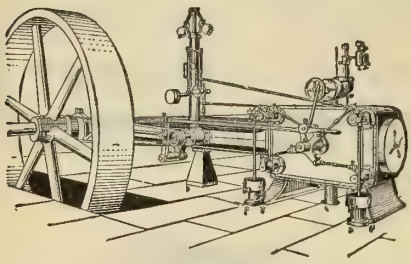

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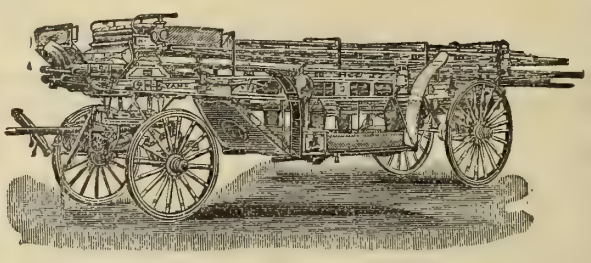

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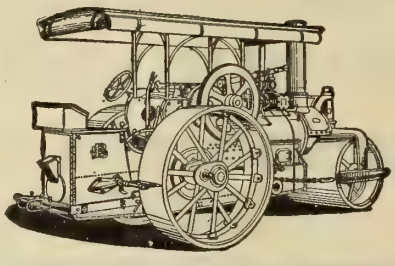

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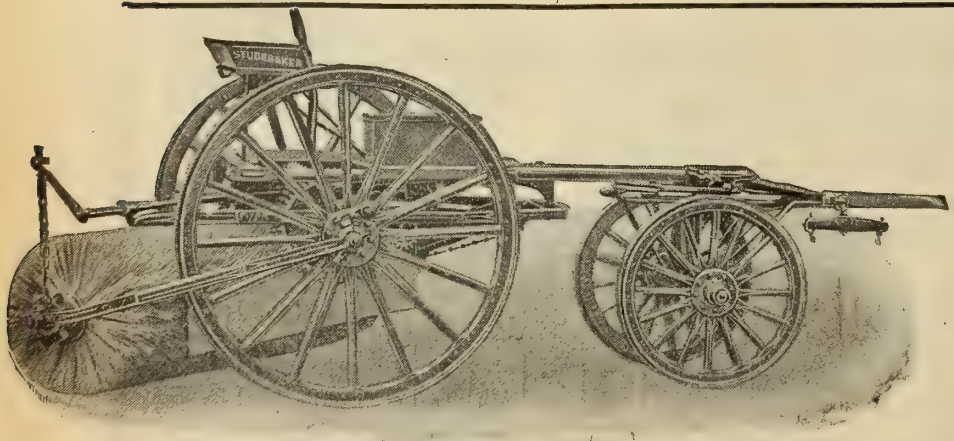

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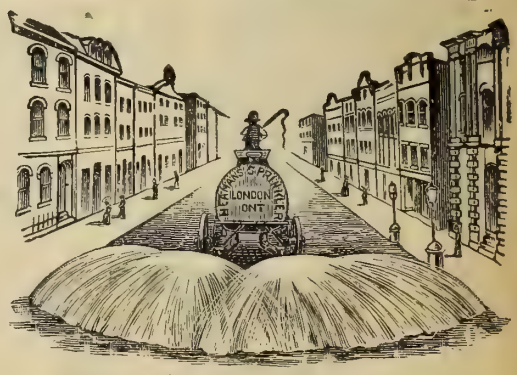

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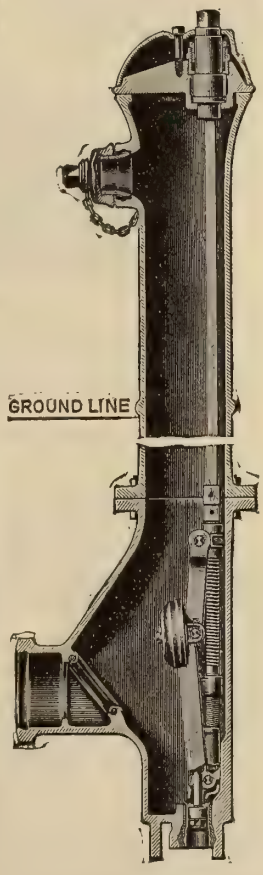

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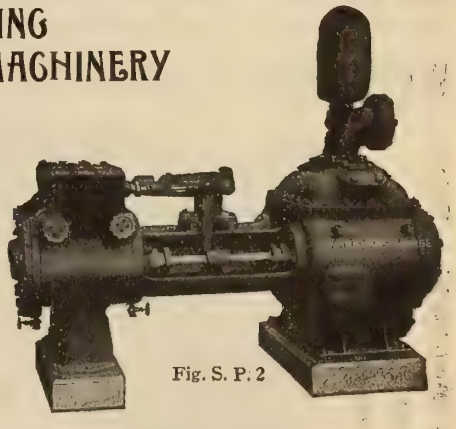

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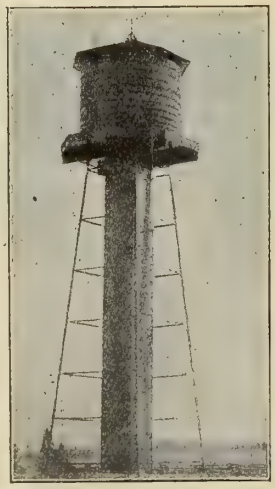

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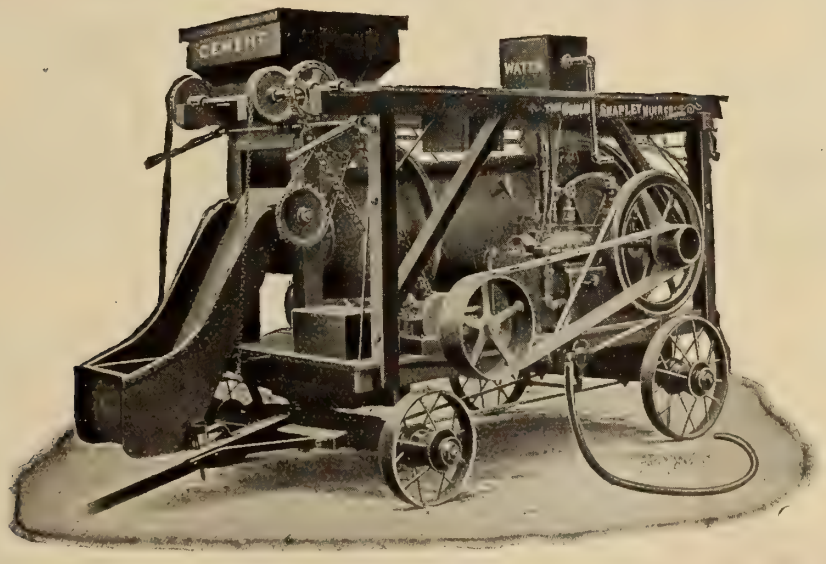
CAST IRON PIPE FOR WATER OR GAS

Special Castings,
Tees, Crosses, Flange Pipe, Valves, Hydrants,
Stand Pipes, Valve Boxes, Drinking and Ornamental Fountains.

District Offices: MONTREAL, HALIFAX, OTTAWA, WINNIPEG, VANCOUVER, ROSSLD

Ideal Automatic Concrete Mixers

The Only Successful Automatic Mixer Made



We also manufacture **Windmills, Tanks and Towers**
for Waterworks, Fire Protection, Etc.

WE INVITE CORRESPONDENCE

GOOLD, SHAPLEY & MUIR COMPANY, LIMITED
BRANTFORD, CANADA

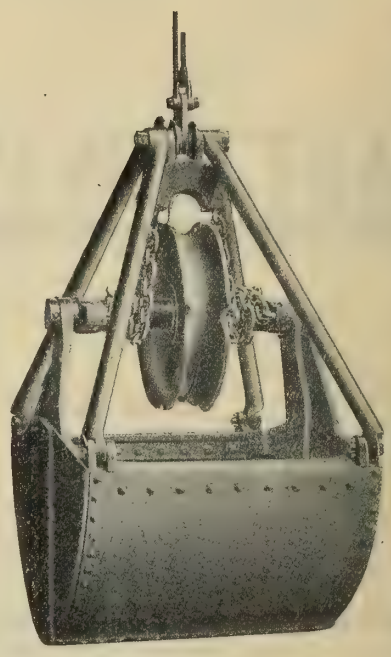
Contractors'

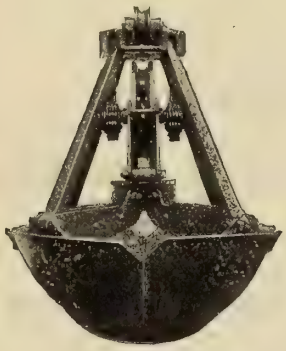
TUBS and BUCKETS

Suitable for every purpose

CONTRACTORS' CLAM SHELL GRAB BUCKET

For handling loose material such as sand, gravel, coke, coal, broken stone, etc., and for light excavating purposes our Clam Shell Buckets are most suitable.



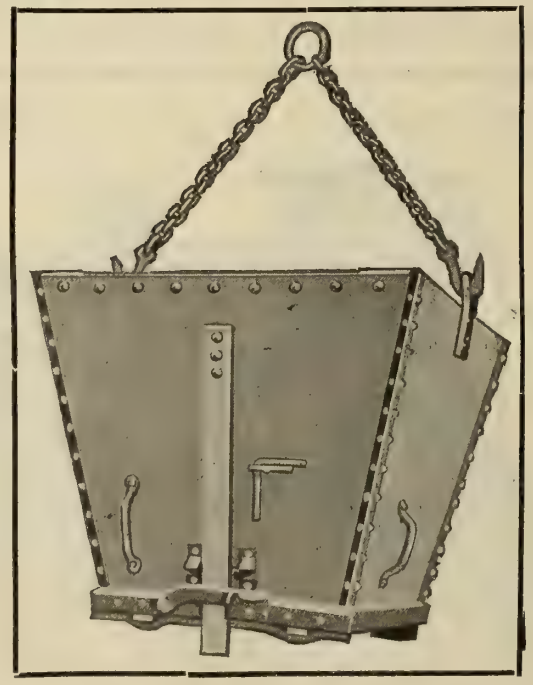


ORANGE PEEL GRAB

This grab is of superior design and construction throughout, and is particularly adapted for excavating and is in common use by contractors and on dredges.

"HOPKINS" CONCRETE BUCKET

This particular style of bucket is in high favor with contractors for all classes of concrete work.



We manufacture this style bucket in any size or shape to meet your special requirments.

Tubs for Coal handling of all descriptions

All Capacities

Immediate Shipment

Buckets of all descriptions

Write us for full particulars and Catalogues

F. H. Hopkins & Co.

Successors to the Late James Cooper

MONTREAL

Dunn Bros., Winnipeg, Agents

CANADIAN

Contract Record

Journal of Public Works, Tenders, nformation and Municipal Progress

ery Week the Town and City Clerks, Town and City Engineers, County nty Engineers, Purchasers of Municipal Debentures and Leading Contractors In All Lines Throughout Canada

, MONTREAL — MAY 23, 1906 — WINNIPEG, VANCOUVER No. 12

THE C. H. MORTIMER PUBLISHING COMPAN
of Toronto, Limited.

Subscription Price, $2 per annum, payable in advance.

CONFEDERATION LIFE BUILDING, TORONTO
Telephone Main 2362.

Branch Offices:
Room B34, Board of Trade Building, Montreal,
Telephone Main 2299.

To Contractors

Tenders will be received by the undersigned until 12 o'clock noon, SATURDAY, MAY 26TH, 1906, for Cut Stone and Pressed Brick Work of large Residence on Walmer Road, Toronto.

The lowest or any tender not necessarily accepted.

GEO. W. GOUINLOCK, Architect,
Temple Building, Toronto.

AGENTS WANTED

Civil engineers know that the semi-regular built road, the BUDAPEST ROAD was laid in 1875, and that it has been successfully used in DIFFICULT POSITIONS since, both THERE and IN BELGIUM and GERMANY. THE PRINCIPLE upon which this road was built has been thoroughly demonstrated by THIRTY (30) YEARS' PRACTICE.

THE AMERICAN MECHANICAL APPLICATION of this principle in road building (**The Nash Road**) has been very different. It has been COMPLETE, not semi, FAR MORE EFFECTIVE, in MANY MORE WAYS, and is VERY MUCH CHEAPER.

Agents wanted throughout Canada for this road. Address **The Nash Road,** Borough of Brooklyn, N. Y. City, U.S.A.

Tenders for Cement Sidewalks

Sealed tenders will be received at the Town Clerk's Office, Whitby, up to MONDAY, 28TH MAY, 1906, for the construction of 10,000 feet of more of Cement Walks in the Town of Whitby.

R. RICHARDSON,
Chairman on Streets.

Bridge Construction

Sealed Tenders, marked "Tenders for Bridges," will be received by the undersigned up to MONDAY, 18TH JUNE 1906, at 12 o'clock noon for the excavation, masonry work, grading, etc., and for steel superstructure (such tenders to be separate) for the construction of Two County Bridges, viz:

(a) "Grant's Bridge, over South Branch of River Aux Raisins at or near Grant's Corners.

(b) The "McRae" Bridge over Payne River where same crosses Roxborough—Finch boundary.

The tenders for superstructure to be accompanied by blue prints showing style of steel bridge proposed.

Forms of tender for substructure and all particulars as to measurements, quantities, etc, will be furnished upon application to the undersigned, and the specifications as to sub-structure and plans, etc., may be inspected at the offices of the undersigned, or of W. H. Magwood, C. E., Cornwall, the engineer in charge.

A certified cheque for 10 per cent. of amount of tender to accompany same.

Lowest or any tender not necessarily accepted.

ADRIAN I. MACDONELL,
Counties' Clerk, S. D. & G., Cornwall, Ont.
Cornwall, May 15, 1906.

SLATE QUARRY

Partially developed; close to railway; near Montreal. Price $5,000 to a prompt cash purchaser. Apply

W. W. STUART,
219 West Sherbrook St.,
Montreal.

Tenders Wanted

$10,000 Debenture Bonds For Sale

Tenders will be received up to JUNE 1ST, 1906, for the purchase of Electric Light Debentures of the Town of Picton, in amount $10,000. Full particulars furnished on application. Address

R. A. NORMAN,
Clerk Town of Picton.

TENDERS

The undersigned will receive "Sealed Tenders" marked "Tenders for Concrete Walks" up to seven o'clock p.m. on the 31ST DAY OF MAY, 1906, for the construction of a quantity of Concrete Walks which the Municipal Council of the Town of Smith's Falls intends to construct during 1906.

An accepted cheque of $200.00 must accompany each tender as a guarantee of good faith.

Specifications and all further available information may be had on application to F. F. Code, Town Engineer.

The lowest or any tender not necessarily accepted.

J. A. LEWIS, Town Clerk,
Smith's Falls, Ont.

NOTICE TO CONTRACTORS

Sealed tenders, marked "Tenders for Bridges" and addressed to the undersigned Engineer, will be received up to 12 o'clock, noon, of FRIDAY, THE 8TH DAY OF JUNE, A. D., 1906, for the furnishing of materials for and construction of:

(a) Two cement concrete bridge abutments with wing walls consisting of about 125 cubic yards, 1, 3, 5 mixture.
About 250 yards of excavation.

(b) 400 cubic yards of earth grading.
70 cubic yards of gravel and broken stone grading.

c) 150 square feet of rip-rap wall 18 inches thick.
825 square feet of rip-rap wall 2 feet thick.

(d) 116 lineal feet of 5 foot plank walk with railings requiring 520 feet of 1½ inch gas pipe.
2,000 pounds of cast iron posts and all necessary plank and cedar sills.

Said works to be built at Winchester Springs in the County of Dundas and Province of Ontario.

Plans and specifications may be seen at the office of the undersigned.

A certified cheque, payable to the Treasurer of the United Counties of Stormont, Dundas and Glengarry, for 5 per cent. of the amount of the tender, must accompany each bid.

The lowest or any tender not necessarily accepted.

Tenders may be submitted on any or all of the four parts mentioned above.

THOS. H. DUNN,
Engineer in Charge.
Winchester, Ont.

EDWARD WALSH
Chairman of Committee, Dunbar, Ont.

Winchester, May 14th, 1906.

ARCHITECT'S ASSISTANT—English training, age 23; desires immediate engagement. Write for interview. Apply Box 81, CONTRACT RECORD, Toronto.

TENDERS

The undersigned will receive tenders up to 7 o'clock p. m. on the 4TH DAY OF JUNE, 1906, for the construction of Cement Walks in Town of Waterloo during 1906.

A marked cheque for $50.00 must accompany each tender as a guarantee of good faith. For specifications and further information, apply to the undersigned.

A. B. McBRIDE, Town Clerk,
Waterloo.

Tenders Wanted

Sealed tenders will be received by the undersigned, up to JUNE THE 9TH, 1906, for the Seating and Leaded Glass Windows required in the Eastern Methodist Church, Napanee, Ont

Plans, specifications and further particulars will be furnished on application to the undersigned.

The lowest or any tender not necessarily accepted.

W. F. HALL,
Secretary of Building Committee.
Napanee, Ont., May 11th, 1906.

CITY OF MOOSE JAW, SASK.

Tenders for Public Works

Sealed tenders will be received by the undersigned, marked "Tenders for Sewers," up to MONDAY, JUNE 4, 1906, at 5 o'clock p. m., for the laying of approximately 3,861 feet of 8" and 1574 feet of 10" Sanitary Sewers, also 1008 feet of 8" and 4435 feet of 6" Wood Stave Water Main.

The lowest or any tender will not necessarily be accepted.

Plans and Specifications can be seen at the office of the City Engineer.

JOHN D. SIMPSON,
Secretary-Treasurer.

CITY OF MOOSE JAW, SASK.

Tenders for Granolithic Sidewalks

Sealed Tenders will be received by the undersigned, marked "Granolithic," up to MONDAY, JUNE 4TH, 1906, at 5 o'clock, p. m., for the construction of approximately 58,878 Super. feet of walk.

PLANK WALKS.

Also sealed tenders mrrked "Plank Walk," for approximately 5,526 lin. feet of 4 foot wide walk.

Particulars can be had on application at the office of the City Engineer.

The lowest or any tender will not necessarily accepted.

JOHN D. SIMPSON,
Secretary-Treasurer.

[FOR ADDITIONAL ADVERTISEMENTS FOR TENDERS SEE NEXT PAGE.]

TENDERS

Sealed tenders will be received by the undersigned for a Concrete Sidewalk in Town of North Toronto up to 7 o'clock p.m. on FRIDAY, THE FIRST DAY OF JUNE, 1906. Plans Specifications and Condition of Tenders can be examined at site of walk, from 3 to 5 o'clock p m. on Saturday, the 26th day of May, 1906, and at Town Hall.

W. J. DOUGLAS,
Clerk and Treasurer,
Town of North Toronto, County York.

SEALED TENDERS

will be received by Charles E. Grant, the Town Clerk, at his office, Town Hall, Orillia, Ont., until 12 O'clock noon, MONDAY, JUNE 11TH, 1906, for the construction of a

CONCRETE DAM

at Ragged Rapids on Severn River near Orillia, Ontario.

Plans and specifications may be seen on and after Monday, May 28th, in the office of the Town Clerk, Orillia, Ont., and the office of the Engineers, McDougall & McRae, Room 55 Citizen Building, Ottawa, Ont.

Lowest or any tender not necessarily accepted.

Papers printing this notice without proper authority shall not be paid.

City of Moose Jaw, Sask.

TENDERS

Sealed tenders will be received at the office of the City Clerk up till 5 p m on MONDAY, THE 28TH, MAY, for the following Fire Apparatus and Street Sprinkler.

1. Hose wagon. Capacity of 600 ft. and 800 ft.
2. Hook and ladder and trucks built for two horses.
3. One street sprinkler 600 gals. capacity for two horses.

The City reserve the right to reject any or all tenders.

JOHN D. SIMPSON,
Secretary-Treasurer.

Moose Jaw, 8th May, 1906.

CITY OF BRANDON

Tenders for

CAST IRON PIPE AND HYDRANTS

Sealed tenders will be received by the City of Brandon until 12 o'clock noon on MONDAY, JUNE 18TH, 1906, for furnishing the following supplies:

150 Ton of 6 inch C.I. Pipe and Specials;
15 Hydrants.

Specifications and conditions of tendering may be obtained on application to the undersigned

The lowest or any tender not necessarily accepted.

W. H SHILLINGLAW,
City Engineer.

Brandon, Man, May 10th, 1906.

Town of Fort William

Board of Water and Light Commissioners

Sealed bids will be received by the undersigned at the office of the Commissioners, Fort William, Ont., Canada, until 7 p.m. the 7TH DAY OF JUNE, 1906, for the Construction of Section 1 of the Loch Lomond Water Supply, with branch for temporary supply to Crescent Lake. The work comprises:

Two earth dams with intake pipe.
2,000 feet of 8 inch wood supply main.
Concrete lined reservoir of 800,000 gallon capacity.
10,000 feet of 18 inch wood pressure main.
10,000 feet of cast iron pipe from 18 inches to 10 inches diameter.

The laying of a duplicate 18 inch cast iron main under the Kaministikwia River 350 feet wide, 28 feet deep with all necessary valves, specials, road making, clearing, etc.

Specifications and form of proposal may be obtained and plans inspected at the office of the Engineer, Town Hall, Fort William.

A certified cheque for ten per cent. of the amount of the bids must accompany the proposal form.

The right is reserved to reject any or all bids, or to accept any tender which appears advantageous to the Commissioners.

A. McNAUGHTON,
Secretary.
H. S. HANCOCK, Jr.,
Engineer.

Fort William, May 14th, 1906.

TENDERS

will be received at the office of the undersigned until noon of FRIDAY, JUNE 1ST, for carpenter work, brick work, plaster work, painting, slate roofing and sheet metal work required in the restoration of the Assembly Hall at the Victoria Industrial School Mimico.

HENRY SIMPSON, Architect
17 Toronto Street, Toronto.

No tender necessarily accepted.

CITY OF KINGSTON, ONT.

Tenders for Laying Steel Pipe

Tenders will be received by the undersigned up to 12 o'clock noon, MAY, 30TH, for laying 350 feet of 36" Steel Pipe for the e tension of the O'Kell Street Sewer in the harbour. Specifications may be seen at the office of the City Engineer, where all other information may be obtained, The lowest or any tender not necessarily accepted.

JOHN CARSON,
Chairman Board of Works.

Temiskaming and Northern Ontario Railway Commission

TENDERS WANTED

Sealed tenders, addressed to the undersigned (and endorsed as tender for the character of the work bid upon), will be received at the office of the Commission, 25 Toronto Street, Toronto, up until 5 p. m., THURSDAY, MAY 31ST, 1906, for the following:

(a)—For the building of a frame passenger station at Englehart (divisional point, formerly known as White River Crossing).

(b)—For the building of wooden coal sheds and trestles at Englehart and North Bay, respectively.

(c)—For the construction of a telegraph line from Englehart to McDougall's Chute, a distance of about 67 miles, the work to embrace the setting of the poles, putting on a two-pin cross-arm, with pins, insulators, and stringing two lines No. 8 Telegraph wire.

(d)—For the construction of a six-pin two-wire telephone lines from New Liskeard to Englehart, a distance of about 25 miles, with branches at New Liskeard and Haileybury; the work to consist of supplying copper wire, yellow pine cross-arms, pins, insulators, ground rods, test boxes, etc., and erecting same on poles already in place with necessary connections, etc., including the erection of two telegraph wires on branches to Haileybury and New Liskeard, as in paragraph C.

Plans and specifications of the Englehart Station and the coal sheds and trestles at North Bay and Englehart, and specifications for telephone line may be seen at the office of the Commission in Toronto, and at Chief Engineer's office, North Bay. Specifications for the telegraph line may be seen at the office of the Commission in Toronto, and at the Chief Engineer's office, North Bay, Divisional Engineer's office at Englehart, and the Station Agent's office at New Liskeard.

Tenders to be made on forms supplied by the Commission, and to be accompanied by certified cheque, as follows:

For Station Building at Englehart, $1,000.
For Coal Sheds and Trestles at Englehart and North Bay, $2,000.
For building of Telegraph Line, $500.
For building of Telephone Line, $500.

Parties desiring to tender on more than one of the above items must make a separate tender for each contract.

The lowest or any tender not necessarily accepted

H. W. PEARSON,
Secretary-Treasurer,
25 Toronto Street.

Dated at Toronto, May 21st, 1906.

Papers inserting this advertisement without authority will not be paid for same.

POSITION VACANT

Wanted at once a thoroughly experienced and competent Clerk of Works. Apply stating experience and salary expected, also references. Box 82 CONTRACT RECORD, Toronto.

CITY OF WINNIPEG

Tenders for Garbage Incinerator

Sealed tenders addressed to Ald. Chris. Campbell, chairman Health Committee, for supply and erection complete of a garbage and night soil incinerator for the City of Winnipeg, of a capacity of 140 tons per day, will be received at the office of the undersigned up to 3.30 p. m.

THURSDAY, JUNE 21, 1906

Full description, plans and specifications of the plant must accompany each tender. All information required will be furnished by Dr. A. J. Douglas, Medical Health officer, Winnipeg.

Each tender must be accompanied by an accepted cheque payable to the order of the City Treasurer, or cash deposit for a sum equal to 5 per cent. of the total amount of the tender, which will be subject to forfeiture in case of failure on the part of the contractor to enter into a written contract, with approved sureties if called upon to do so.

The city reserves the right to reject any or all tenders or to accept any bid which appears advantageous to the City of Winnipeg.

C. J. BROWN,
City Clerk.

City Clerk's Office,
Winnipeg, May 19, 1906.

Tenders For Debentures

City of St. John, New Brunswick

Tenders, addressed Treasury Department, City of Saint John, Province of New Brunswick, and marked "Tenders for Debentures", will be received by the undersigned, up to 12 o'clock noon, on the TWENTY-EIGHTH DAY OF JUNE, 1906, for the purchase of Seven Hundred and Twenty-One Thousand ($721,000) Dollars "Saint John City Debentures", to be issued by the City of Saint John, payable at the expiration of forty years, with interest at four (4) per cent. per annum, payable half yearly, from the first day of May, 1906. Principal and interest may be payable at Chamberlain's office, in Saint John, New Brunswick, or in Great Britain or elsewhere.

The Debentures may be expressed in sterling money of Great Britain, in currency of Dominion of Canada, or in the currency of any Foreign Country, and in sums not less than Five Hundred Dollars each as purchaser may desire.

Resolutions passed by the Common Council of the City of Saint John provide for the formation of a Sinking Fund for the redemption of these Debentures at maturity.

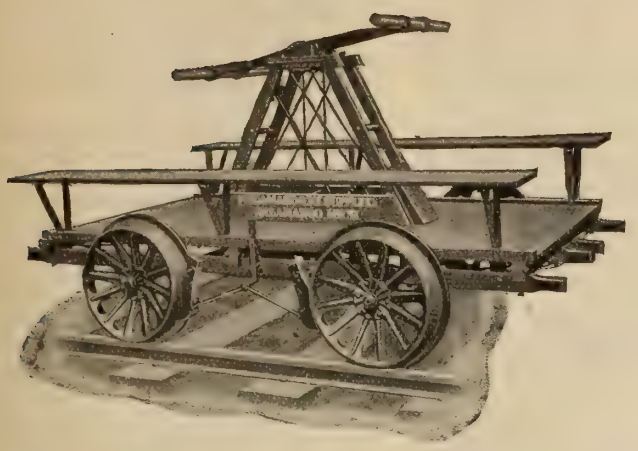
Parties tendering must state in their tender in what currency, in what sums and where they desire the Debentures and Interest to be made payable.

The highest or any tender not necessarily accepted.

By order of the Treasury Department of Common Council.

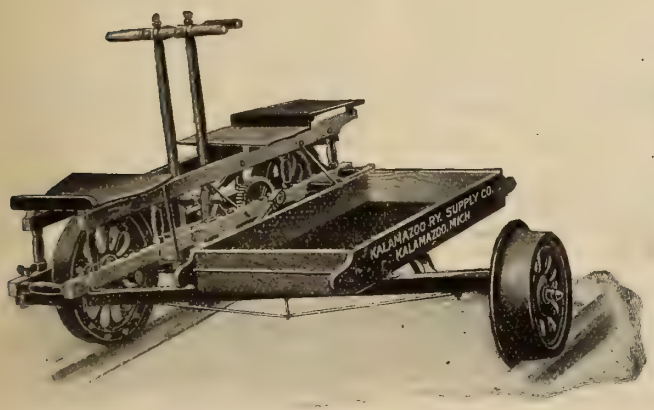
HERBERT E. WARDROPER,
Common Clerk,
City of Saint John, N. B.

Prospectus in connection with above loan may be obtained on application.

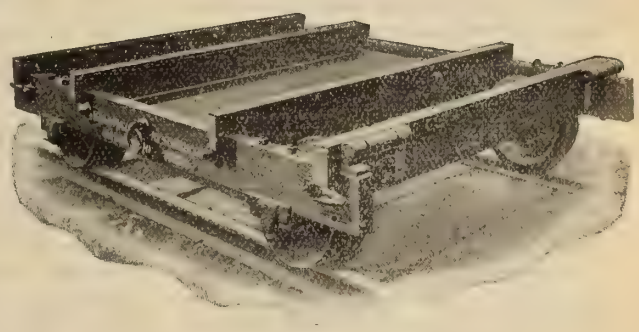


Hand Cars

Push Cars



Railway Velocipedes



Rail Cars

Catalogues on Application
covering these lines as well as

Railroad Graders — Wheel and Drag Scrapers
Dump Wagons — Dump Carts
Rock Crushers — Light Locomotives
Track Tools, Etc.

W. H. C. MUSSEN & CO.

Railway, Mining, Municipal and Contractors' Supplies
MONTREAL

CONTRACTS OPEN.

ROXTON FALLS, QUE.—The convent here is to be enlarged, cost $5,000.

MONCTON, N. B.—L. C. Lynds intends building a residence on Highfield street.

COBALT, ONT.—The Roman Catholics have decided to erect a new church here.

NIAGARA, ONT.—A by-law has been carried to raise $15,000 for cement sidewalks.

THESSALON, ONT.—T. E. Williams is having plans prepared for his new residence.

LONDON, ONT.—Dr. C. C. Ross, Hyde Park, has taken tenders for erection of a hall here.

BATTLEFORD, SASK.—A by-law will be voted on to raise $14,000 for an electric light system.

AMHERST, N.S.—Amherst capitalists are considering the establishment of an automobile factory here.

KEMPTVILLE, ONT.—Andrew Carnegie has offered the town $2,000 for erection of a public library.

MORVEN, ONT.—F. F. Miller, C. E., has taken tenders for the erection of an Anglican church building.

ST. JOHNS, QUE.—It is understood that the erection of the new post office building will begin at an early date,

LILY BAY, MAN.—The C.N.R. have made a survey through this place for a line from Oak Point to Chippewa Creek.

ELORA ONT.—A by-law has been carried to loan $3,500 to A.Parker for the establishment of a furniture factory.

ST. ANNE DE BEAUPRE, QUE.—It is understood that the rebuilding of the Regina Hotel will be begun at once.

OAKVILLE, MAN.—W. H. Burns wlil receive tenders up to June 7th for the purchase of $5,000 school debentures.

TORONTO JUNCTION, ONT.—Dr. Hopkins intends building a residence on Pacific avenue, cost about $5,000.

COATICOOK, QUE.—The members of St. Stephen's church are receiving subscriptions for new church building.

BERLIN, ONT.—W. M. Cram will receive tenders up to May 25th for building St. Andrew's Presbyterian church.

OSHAWA, ONT.—T. Hawkes will receive tenders up to May 26th for alterations to Mary and Albert street schools.

MINNEDOSA, MAN.—The Don Cereal Milling Co. are considering the erection of an oatmeal mill, cost $30,000.

OUTREMONT, QUE.—J. A. Kruse will receive tenders up to June 1st for construction of 7,000 feet of cement sidewalks.

COLLINGWOOD, ONT.—W.A.Tom will receive tenders up to May 28th for construction of cement sidewalks in the town.

NIAGARA-ON-THE-LAKE, ONT.—A by-law has been carried to raise $15,000 for construction of cement sidewalks.

HANOVER, ONT.—The Hanover Portland Cement Co. will rebuild the part of their building recently destroyed by fire.

QUEBEC, QUE.—E. C. Hopkins, Provincial Architect, has plans prepared for new Capital buildings, cost about $400,000.

NORTH TORONTO, ONT.—The York Township Council purpose erecting two steel bridges in the west side of the township.

GLACE BAY, N. S.—The Council have decided to raise $20,000 for electric light purposes and $35,000 for school purposes.

UXBRIDGE, ONT.—J. W. Gould, Town Clerk, has taken tenders for the construction of granolithic sidewalks in the town.

WATERLOO, QUE.—A by-law has been carried to loan $30,000 to A. S. Savaria to aid in construction of additional buildings.

VANCOUVER, B. C.—C. E. Beckman will erect a stone and concrete building corner of Water and Gamble streets, cost $21,000.

EDMONTON, ALTA.—H. C. Bush will build a residence corner McKay and Eighth street, cost $7,500. H. A. Magoon architect.

SMITH'S FALLS, ONT.—R. A. Bennett has taken tenders for a stone building for the Rideau Malleable & Foundry Co.

RED BANK, N. B.—M. Sutherland will receive tenders up to June 6th for the erection of a Presbyterian church. Plans with J. Park.

SYDNEY, N. S.—Lynch Bros., Dolan & Co., have secured a site on Johnston street for an extension to their candy and biscuit factory.

BLIND RIVER, ONT.—F. Thompson will receive tenders up to June 5th for alterations and additions to the Public school building.

SOREL, QUE.—The time for receiving tenders for suction pump and triple expansion steam engine has been extended to June 12th.

PORT HOPE, ONT.—The Street and Bridge Committee have been authorized to get estimates of cost of construction of sewerage works.

FORT WILLIAM, ONT.—The Council gives notice of its intention to consruct asphalt block pavement on Donald street from May to Brodie.

FARIVIEW, B.C.—Plans are being prepared for a private hospital building for Dr. T. P. Hall, of Hillside, and Dr. E. Hall, of Victoria.

CARLYLE, SASK.—C. Goddard, C. E, of St. Boniface, has been making estimates of drainage and waterworks systems for the town.

ST. BONIFACE, MAN.—Luther & Walker, architects, will receive tenders up to May 29th for erection of a brick and stone school building.

WOODSTOCK, N. B.—J.C. Hartley, Town Clerk, has taken tenders for construction of sewers on Grover and Elm streets and Houlton road.

FOREST, ONT.—R. Karr, Town Clerk, will receive tenders up to May 28th for construction of four cement culverts on the Alexander drain.

HAILEYBURY, ONT.—Connor, Clark & Monds, Toronto, have been engaged to report on waterworks and sewerage systems for the town.

PEMBROKE, ONT.—The congregation of Holy Trinity have purchased a site on Renfrew street for a new church building, to cost about $15,000.

WELLAND, ONT.—E. Hughes will receive tenders up to May 26th for erection of a store building on East Main street. W. T. Nichols, architect.

WELLINGTON, B. C.—N. F. McKay, Lands and Works Department, Victoria, has taken tenders for the erection of a new school building here.

WEYBURN, SASK.—Dr. Cunningham has purchased a site for a new residence.—Plans are being prepared for a large hotel building for W. T. McKenzie

MOOSE JAW, SASK.—J. Chisholm architect, Winnigeg, has taken tenders for erection of a stone and brick church building for the Methodist congregation.

ST. IRENEE, QUE.—Huot & Payette, architects, Montreal, are preparing plans for new buildings to be erected and improvements made by R. Forget, cost about $300,000.

RENFREW, ONT.—Tenders have been taken by I. E. Pedlow for erection of addition to Collegiate Institute building, also for heating and remodelling the present building.

PORT PERRY, ONT.—Parliament has granted permission to build branch lines of the Huron & Ontario Railway from this town to Whitby and from Goderich to Strathroy.

PARRY SOUND, ONT.—Tenders will be rrceived by the Minister of Public Works, Toronto, up to May 26th for the erection of a Jailer's residence here. Plans at Sheriff's office.

BRANTFORD, ONT.—Building permits have been issued to Edward House for brick addition to factory on Dalhousie street, cost $1.300, and to Wm. Cutmore for brick dwelling on Brant avenue, cost $2,000.

BRANDON, MAN.—The Methodist congregation are considering the enlargement of their church, cost $25,000.—The paving of Rosser avenue is being considered.—The Civic Crushing plant is to be enlarged.

ARNPRIOR, ONT.—The Diamond Park Mineral Water Co. will receive tenders up to May 26th for erection of a building for bottling works, corner John and William streets.

REGINA, SASK.—A bill has been presented to the Legislature to grant the Regina and Saskatchewan Railway Co. power to build lines from this town to Willow Bunch, and from Prince Albert to the northern boundary.

VICTORIA, B. C.—The Vancouver Island Portland Cement Co. purpose enlarging their plant at Tod Creek.—J. Dunsmuir is interested in a scheme for the erection of a School of Science.—Plans are being prepared for alterations in the Exhibition Hall.

WALKERTON, ONT.—W.M. Black will receive tenders up to June 5th for a two-storey brick addition to the Bruce General hospital here.—A by-law has been passed to aid the Knechtel Furniture Co. in making addition to their factory.

HALIFAX, N.S.—The City Engineer has reported on construction of sewers on Needham and Windsor streets.—The Council have ordered the construction of a number of sidewalks.—A site corner of Tower road and Morris street has been selected for St. Luke's cathedral.

SARNIA, ONT.—J. D. Stewart, Town Clerk, will receive tenders up to June 4th for construction of asphalt block or vitrified brick pavement on George street. Plans at his office.—The Council gives notice of intention to construct granolithic sidewalks on Mitton street from George to Cromwell.

PRINCE ALBERT, SASK.—N. W. Morton has taken tenders for the erection of an office building for the Bank of Ottawa.—C. G. Young has taken tenders for the erection of a new church for St. Paul's congregation.—Hamlin Bros. & Co. have purchased a site on King street for large block building.

OTTAWA, ONT.—The Transcontinental Railway Commission will receive tenders up to June 7th for 65,000 tons steel rails and fastenings and 1,545 railway ties.—The Ottawa Improvement Commission have recommended a bridge over the Rideau canal at Gladstone avenne—An American pottery firm are looking for a site here for their business.

CORNWALL, ONT.—Tenders will be received up to 1st of June for erection of new St. Paul's Home. Plans with E. O'Callaghan.—J. Mullen, Township Clerk, Cornwall Centre, will receive ten-

ders up to June 11th for construction of south branch drainage scheme in the townships of Cornwall and Charlottenburg. Plans with above named and with W. H. Magwood, C. E.

CALGARY, ALTA.—N. E. Brooks, Division Engineer C.P.R., will receive tenders up to May 28th for the erection of engine houses at Medicine Hat, Red Deer, MacLeod, Lethbridge, Crow's Nest. Plans at his office and with assistant chief engineer, Winnipeg and with resident engineer, Cranbrook, B.C.—The Trades and Labor Council have purchased a site on Sixth avenue for a labor temple, cost about $25,000.

HAMILTON, ONT.—The following building permits have been issued :— Alex Milne, brick dwelling Stinson street, $2500 ; J. W. Blasdell, brick dwelling Locke street, $2000 ; E. P. Patterson, brick and stone residence corner Main street and Sanford avenue, $4000.—It is stated that the Toronto & Hamilton Sewer Pipe Co. will rebuild their works recently destroyed by fire.—R. & J. Poag, contractors. will erect brick residences on Mary street.

STRATFORD, ONT.—The following building permits have been issued :— George Litt, brick residence, Brunswick street ; D. Blain, brick veneer residence, Cobourg street ; D. M. Ferguson, alteration to Idington block ; Miss Douglass, brick veneer residence, Douglas street ; Mrs. J. Easson, brick residence, Mill street ; D. and T. Smith, brick residence Albert street ; D. and T. Smith, brick residence, Mary street ; J. R. and J. H. Ballantyne, brick residence, Elizabeth street.

PETERBORO, ONT.—A new office building will be erected on Simcoe street for the Peterboro Cereal Co. and the Otonabee Power Co.—The Peterboro Light & Power Co. purpose erecting a large gas holder.—W. H. Moore has sold the old Y. M. C. A. building on Brock street, which will be remodelled for a dental office.—The congregation of Park street church are considering the erection of a new building.—A. A. MacIntyre will erect three double houses this summer.—The Board of Works will call for tenders for construction of sewer on Water street between Smith and Hilliard.

OTTAWA, ONT.—C. Ogilvie will erect a store corner Rideau and Nicholas streets.—The City Council gives notice of its intention to construct a number of concrete sidewalks and tar macadam pavements.—The following building permits have been issued :— S. Hartein, brick veneer dwelling, Nepean street, $2,500 ; H. I. Thomas, brick veneer dwelling, McLeod street, $3,500 ; R. J. Nolan, brick veneer and iron-clad dwellings, Rochester street, $7,000 ; F. Bissonette, brick veneer dwelling, Archibald street, $2,500 ; J. R. Charbonneau, brick shop and dwelling, Elgin street, $3,300 ; Charles Rupert six brick veneer dwellings, Kent street, $8,000.

FORT WILLIAM, ONT.—B. Strachan is receiving tenders for erection of a residence on Syndicate avenue.—G. H. Coo intends building addition to his residence, corner Miles and Archibald streets.—The Fort William Hardware Co. will build a three-storey brick block, corner Simpson street and Victoria avenue, cost about $30,000.—H. R. Halton, architect, is preparing plans for a cement business block for J. A. Charlton. He is also preparing plans for a new Catholic church cost $20,000.—W. S. Piper will make an addition to his block on Victoria avenue.—J. C. Stinson, architect, has prepared plans for a three-storey business block on Victoria avenue for the John King Co. cost $30,000.—Same architect has taken tenders for erection of a three-storey brick hotel for J. Timbers & Son.

MONTREAL, QUE.—The Canadian Rubber Co. will issue $500,000 new stock for extension to plant.—The plans for the new building on McGill street for the G. T. P. R. have been submitted to the

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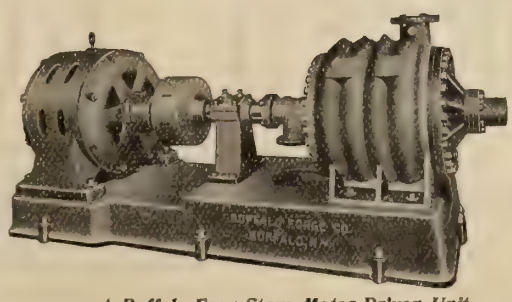

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building inspector; solid stone, three stories. The Montreal Locomotive & Machine Co. are planning for extension of their works at Longue Pointe, cost about $1,000,000.—A. T. Patterson & Son will remodel their building at 100 St. Francois Xavier street, cost $23,600.—L. O. David, City Clerk, will receive tenders up to May 28th for erection of a revetment wall, balustrade and two pavilions at the lookout at Mount Royal Park. Marchand & Haskell and E. & W. S. Maxwell, architects.— Estimates have been prepared for pavements needed, cost $1,117,900.—The Shearer, Brown & Mills Co., of this city, will build a new saw mill on the Dickson limit.

WINNIPEG, MAN.—Plans for the new Imperial Bank building are nearing completion and it is expected that construction will soon begin.—The Bridge Committee have decided on Redwood avenue as the location for the new bridge over the Red River.—J. H. Russell, architect, is preparing plans for residence for W. Howie, cost $17,000.—Darling & Over, architects, are preparing plans for a six-storey office block, corner Portage avenue and Main street, for Osler, Hammond & Nanton.—A. & W. Melville, architects, have prepared plans for a four-storey apartment block, corner Broadway and Garry streets for G. H. Walton, cost $50,000. — The Baptists residing near Broadway have decided to form a new congregation and erect a church. R. J. Kennedy, 213 Sherbrooke street, is interested.—H. C. Stone, architect, is preparing plans for nine-storey hotel building corner of Ellice avenue and Smith street. —The plans for the new police station have been approved and work will soon begin.—C. J. Brown, City Clerk, is asking for offers of property for market site in Ward 7.—Plans have been prepared for a new club house for the Whytewold Beach Club.—The advertisement calling for tenders for electric generators for the city has been withdrawn, the Committee having made other arrangements for the supply of power.—V. W. Horwood, architect, has taken tenders for alterations to residence of A. A. Strang on Nasseau street.—J. H. G. Russell, architect, has taken tenders for erection of a residence on Stradbrook place for F. E. Martin.—J. Chisholm, architect, will receive tenders up to May 26th for erection of a brick block on Portage avenue for M. Shipley.— Stevens & Patterson, architects, have taken tenders for the erection of a residence on McDermot street for T. H. Johnson.—The Works Committee have taken tenders for construction of sewers on Clare, Mountain and Winnipeg avenues and on Fisher and McGregor streets, also for asphalt pavement on Scotia street and Wardlaw avenue. They also give notice of intention to construct a sewer on McKee street.—The City Engineer has submitted estimates on cost of paving the markets, cost $19,802.—Lang & Wiborg, real estate dealers, have sold a site in Elmwood which it is understood will be used for factory building.

TORONTO, ONT.—Tenders will be received at 126 Wolseley street for plastering and plumbing two houses.—The directors of the Y. M. C. A. are considering the erection of a three-storey building on Yonge street for the boys' department.—The City Engineer has reported on the cost of the bridge across the Donat Wilton avenue, to cost $170,000. —The McCormack Estate purpose erecting an addition to "Oaklands" on Avenue road, cost $42,000. — Symons & Rae, architects, will receive tenders up to May 26th for painting, plastering, plumbing, electric wiring and heating of the Hebrew Synagogue on University avenue.—G. W. Brownlee, superintendent G.T.R., Union station, will receive tenders up to May 26th for clearing site for the new station building.—It has been decided to erect another building in connection with the School of Practical Science, to cost $50,000.—The House of Providence will erect a new Infants' Home on Sackville street, cost $60,000.—Delaney, Pettit Co. have purchased a site near the Mercer Reformatory for an extension of their factory buildings.—The Masonic Temple Co. is being formed to acquire the property, corner of Yonge street and Davenport road, on which to erect a four-storey building, cost $35,000. — The Toronto Railway Co. purpose erecting car barns in the north-west part of the city, also a power house in the west end.—F. B. Robins, real estate dealer, has purchased the Yonge street arcade and it is under-

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stood extensive alterations will be made. —F. E. Phillips has purchased the property at 49 and 51 Richmond street east, which will be remodelled into a paint shop. — The following pavements are recommended by City Engineer: Vitrified block: George street, from Front to King, $2,661; Frederick street, from Front to King, $2,707; Sherbourne street, from Front to King, $2,643. Asphalt pavements: Ann street, from Yonge to Mutual, $7,290; Gerrard street, from Yonge to Elizabeth, $5,964; McGill street, from Yonge to Mutual, $7,265; Bond street, from Queen to Gould, $14,858; Mutual street, from Queen to Wilton avenue, $8,814; Hayter street, from Yonge to Chestnut, $8,531; Albert street, from Teraulay to Chestnut, $6,461. Asphalt block pavement: Albert street, from James to Teraulay, $4,801. Brick pavement: St. Nicholas street, from St. Albans street to south end, $1,319.—Building permits have been issued as follows: McBean & Verral, 2-storey brick and stone dwelling, St. Clarens ave., near College street, cost $7,000; F. & J. Thompson, pair 2-storey and attic stone and brick dwellings, Huron street, near Dupont, cost $7,000; A. Burns, pair 2½-storey brick stores and dwellings, Dundas street, near Lisgar, cost $6,000; G. Noble, 3-storey stone and brick store and dwelling, 559 Bloor street, cost $5,000; W. O. McTaggart, pair 2-storey brick and stone stores and dwellings, 1001-3 Bloor street, cost $7,000; W. S. Elliot, 2-storey brick dwelling, 652 Huron street, cost $4,800; A. B. Beaver, 2-storey cement block, Birtle ave., cost $2,500; W. Apps, 2-storey brick dwelling, Forest Hill road, cost $3,500; J. Troup, pair 2-storey brick dwellings, Alhambra ave., cost $5,600; C. Mould & Son, pair 2-storey brick dwellings, Dundonald street, cost $8,000; J. Sherlock, 2½-storey brick dwelling, McKenzie crescent, cost $3,700; C. W. Chadwick, 2-storey and attic brick dwelling, 129 Deleware ave., cost $3,500; R. A. Pogue, 2-storey brick dwelling, Grafton ave., cost $2,800; W. G. Hunt, 2-storey and attic brick veneer dwelling, Westmoreland ave., cost $3,000; R. B. Hayhoe, 2 storey brick and stone dwelling, Dufferin street, near Bloor, cost

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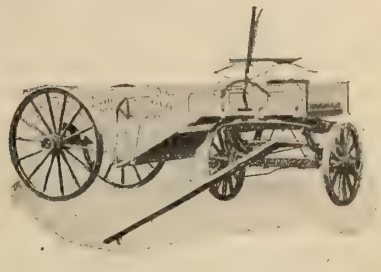

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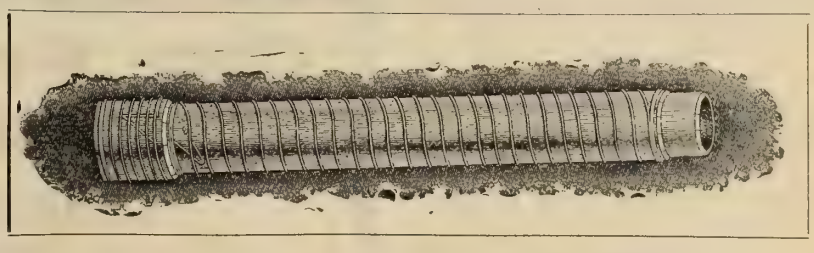

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CONTRACTS AWARDED.

PARIS, ONT.—New station building: S. F. Whitham, Brantford, contractor.

DUNREA, MAN.—$4,000 6 per cent. debentures: J.W. Nay, Regina, purchaser, $4,318.

SELKIRK, MAN.—$9,000 school debentures: Confederation Life Association, purchasers.

SINTALUTA, SASK. — J. W. Nay, Regina, has purchased $11,400 school debentures.

KIPPEN, ONT.—Store and post office building: Reynolds & Ingram, of Hensall, contractors.

BUXTON, ONT.—Erection of Presbyterian manse: Finlay & Cocker, Blenheim, contractors.

CORBYVILLE, ONT. — Warehouses for the Corby Distillery Co.: Wm. Alford, Belleville, contractor.

ST. CATHARINES, ONT. — Asphalt block pavement on Chestnut street: Newman Bros., contractors.

PERTH, ONT.—Business block for Rogers & Stewart: W. J. Rabb, Almonte, contractor, cost about $9,000.

EMERSON, MAN. — Rebuilding of public school: Hempton Bros., Dominion City, contractors.

PORT CREDIT, ONT.—Residence for E. S. Munro: Fisher & Co., of Brantford, contractors, cost $6,500.

SHELBURNE, ONT.—Store building on Main street for S.F.M. O'Flynn & Son: Frank Cole, contractor

COBOURG, ONT.—Residence for W. H. Rowe, Pittsburg: Constable Construction Co., of Pittsburg, contractors.

KILLARNEY, MAN.— Public school building: Snider Bros., Portage la Prairie, contractors, cost $15,000.

ST. JEAN BAPTISTE, MAN.—$6,000 5 per cent. school debentures: J. W. Nay, Regina, purchaser, $6,127.50.

BELLEVILLE, ONT. — Erection of Victoria avenue Baptist church: Ex. Ald. Harris, contractor, cost about $13,000.

REGINA, SASK.—Bitulithic pavement on South Railway street: Warren Bituminous Paving Co., of Toronto, contractors, cost about $44,000.

GODERICH, ONT.—Baptist church building: Brick and mason work, C. A. Reid & Co.; carpenter work, Goderich Planing Mills Co., cost about $5,500.

NORTH BAY, ONT. — Erection of tanks for T. & N. O. R. near Uno Park, Englehart, Blanche River and White Clay River: Hasset & Gervais, Cobalt, contractors.

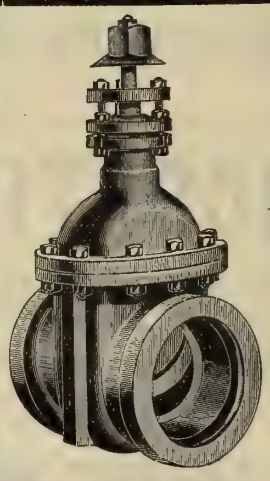
PETERBORO, ONT. — House of Refuge bmilding: Baptie Bros., Lakefield, successful tenderers, cost $18,093.—Residence on Water street for J. J. Turner: A. A. MacIntyre, contractor.

ST. THOMAS, ONT.—Residence on Hinks street for D. Migley: Masonry, A. E. Ponsford; carpenter work, H. Lindop; plastering, C. Lee; painting, E. Dallyn; plumbing, Foster Cook. A. N. Darrach, archltect.

TORONTO, ONT. — Molsons' Bank building, Bay street: C. E. Deakin, Montreal, successful tenderer. Darling & Pearson, architects.—The T. & N. O. Railway Commission have given the contract for five passenger coaches to the Rhodes, Curry Co., of Amherst, N.S., and for four coaches to the Crossen Car Co., of Cobourg.

MONTREAL, QUE.—Railway line between Rouse's Point and Adirondack Junction, 15 miles: Roger & Quirk,

(Continued on page 13.)



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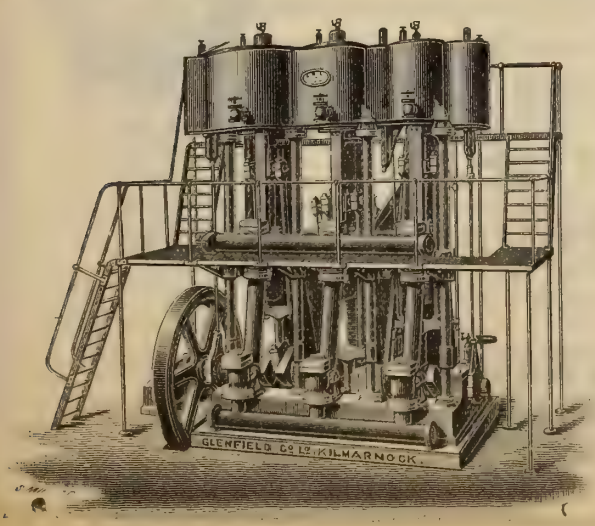

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The best color and most durable for cement blocks and sidewalks.

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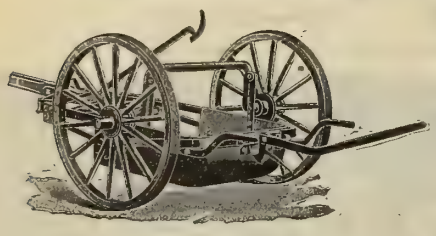

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Tests of

NATIONAL Portland Cement

BY

The City Engineer of Toronto for 1903-4

Note the High Grade of National. Compare it with others.

Year.	No Samples Tested.	Soundness Faiji Test.	Specific Gravity	Residue in Test on No. 100 Sieve	Setting Time in Minutes		Tensile Strength in pounds per square inch.									
							Neat.					3 (Sand) to 1 (Cement)				
					Initial	Final	1 dy.	7 dys.	28 dys.	3 mos	1 yr.	1 dy.	7 dys.	28 dys.	3 mos.	1 yr.
1903	20	O.K.	3.135	2.1	162	345	307	701	783	827	*	74	214	299	367	*
1904	44	O.K.	3.150	2.0	132	342	300	744	848	914	938	86	262	354	401	427

* Tests for 1 year were not completed when records closed. 1905 report not yet issued.

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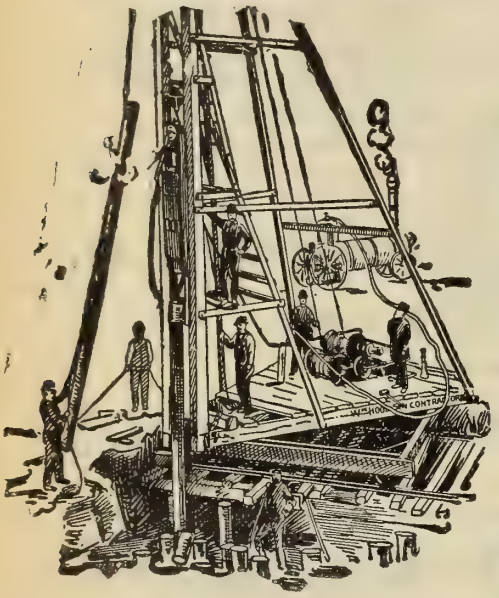

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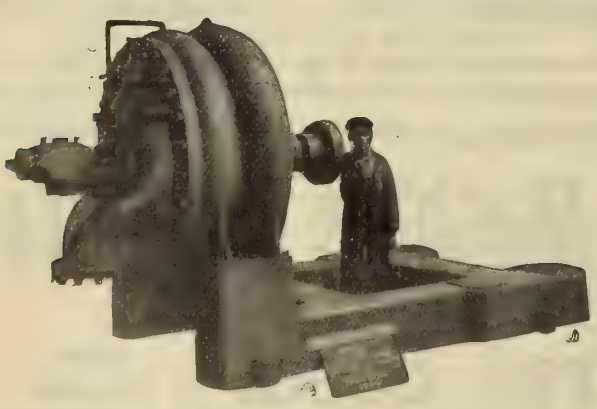
FOR WATER WORKS SERVICES



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for heads up to 2,000 feet, are Reliable, Durable, Efficient and exceedingly simple

WE ALSO MANUFACTURE

Boilers, Tanks, Filters
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We Have Two Stage Pumps in Operation Delivering Against 160 Pounds Pressure

The John McDougall Caledonian Iron Works Co.,

ESTABLISHED 1852 Montreal. Limited.

contractors.—Branch post office building corner University and St. Catharine streets: Joseph Bourque, Hull, contractor, cost $57,000. M. Perrault, architect.

WINNIPEG, MAN.—Apartment block on Lily street for J. Burridge: W. Naylor and Nelson & Tyson, successful tenderers. Young Methodist church on Broadway: Mason work, N. Naylor; carpenter work, Grey and McKinney; plumbing and heating, Northern Plumbing Co.; painting and glazing, R. Crawford; sheet metal work, A. B. Ormsby & Co.; electrical work, James Stuart Electrical Co., cost $30,000.

MONCTON, N. B.—The Paul Lea Co. have secured the contracts for residences on St. George street for Mrs. J. E. Price and K. A. McLean & Co.—The Moncton Wood-Working Co. have secured contracts to build residences for Mrs. O. Jones, F. O. Condon, R. Wartman and A. Welling. —D. A. Jonah has the contract to build a residence on Highfield street for H. E. Wilbur.

HAMILTON, ONT. — The Canadian Westinghouse Co. have secured the contract for supplying equipment for the W. E. & L. S. Railway between Windsor and Chatham, cost $125,000.—The Market, Fire & Police Committee recommend the acceptance of the following tenders for the new patrol station: Masonry, H. C. Gummo, $4189; carpentry, H. McKellar, $2,277; painting, G. Smith, $202; roofing, J. E. Riddel, $272.

NEW COMPANIES.

Windsor Dredging Company, Limited, Windsor, Ont., incorporated, capital $40,000. Directors, A. K. Healey, A. Peltier, W. J. McKee and others.

Cobalt Chartered Company, Limited, Haileybury, Ont., incorporated, capital $350,000. Directors, F. Law, A. Lebeau of Montreal, and others.

Roofer's Supply Company, Limited, Toronto, Ont., incorporated, capital $200,000. Directors, A. Dods, R. B. Rennie, G. Duthie, and others.

McKinley-Darragh-Savage Mines of Cobalt, Limited, Toronto, Ont., incorporated, capital $2,500,000. Directors, G. W. Spence, A. M. Duncan, and others.

Cobalt & Hudson Bay Development Company, Limited, Haileybury, Ont., incorporated, capital $100,000. Directors, J. E. Day, J. M. Ferguson, and others.

Rapid Tool Company, Limited, Peterboro, Ont., incorporated, capital $40,000. Directors W. Rudkins, W. Quinn and G. L. Hay.

Hudson Bay Extended Limited, Toronto, Ont., incorporated, capital $50,009, to carry on mining, milling, etc. Directors, J. W. McDonald, E. A. Francis, M. A. McKessock.

Jenkins Bros. Limited, Montreal, Que., incorporated, capital $200,000, to manufacture and deal in valves, couplings, etc. Promotors, W. B. Jenkins, West Orange, N.J, F. T. Swain, East Orange, N. J., and others.

Canadian Iron & Foundry Company, Limited, Montreal, Que., incorporated, capital $2,000,000.

Robinson's Patent Moulds

For sewer and culvert pipes with adjustable cone top filler and reversible bottom ring for making plain or telescopic joints, made of heavy galvanized steel and guaranteed to be the best on the market. Sizes 4" to 48".

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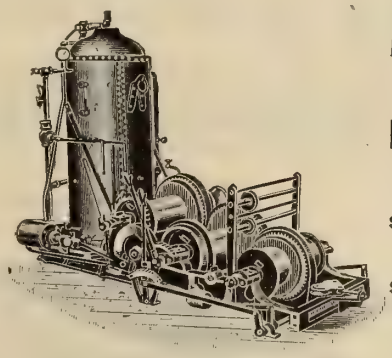

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Promotors, T. J. Drummond, G. E. Drummond, T. Brosseau, and others.

Montreal Reduction & Smelting Company of Canada, Limited, Montreal, Que., incorporated, capital $2,000,000. Promotors, J. B. Leonard, B. Burland, and others.

Dominion Prospecting & Mining Company, Montreal, Que., incorporated, capital $100,000. Promotors V. B. Campbell, A. Tardif, T. Astle, and others.

Mining & Lands Development Company, Limited, Toronto, Ont., incorporsted, capital $40,000. Directors, W. A. Preston, W. J. Elliott and R. D. Hume.

G. Duthie & Sons, Limited, Toronto, Ont., incorporated, capital $40,000, to carry on the business of roofers and sheet metal workers, etc. Directors, G. Duthie, J. B. Duthie and others.

Carbolite Carbolineum Company, Limited, Toronto, Ont., incorporated, capital $40,000. Directors, C. W. Laker, G. H. Klimer, W. H. Irving and others.

Semmens & Evel Casket Company, Limited, Hamilton, Ont., incorporated, capital $250,000. Directors, A. W. Semmens, J. J. Evel and others.

Hoidge Marble Company, Limited, Toronto, Ont., incorporated, capital $40,000. Directors, W. Cowan, J. R. Hoidge and J. B. Vick, all of Toronto.

Bothwell Locomotive Company, Limited, Owen Sound, Ont., incorporated, capital $100,000. Directors, L. McLauchlan, F. W. Harrison, J. G. Hay, and others.

Peterson Lake Silver Cobalt Mining Company, Limited, Toronto, Ont., incorporated, capital $3,000,000. Directors, B. E. Bull, J. Montgomery, J. G. Shaw, and others.

Star Silver Cobalt Mining Company, Limited, Toronto, Ont., incorporated, capital $2,000,000. Directors, J. Meen, J. A. Shaw, J. Montgomery, and others.

Coppers, Limited, Montreal, Que., incorporated, capital $2,000,000, to purchase and operate mines. Promoters, R. P. Inglis, G. Boulter, W. H. C. Mussen, and others.

Ross & Harris, Company, Limited, Montreal, Que., incorporated, capital $200,000, to carry on the business of general contractors. Promoters, J. Ross, Toronto; J. W. Harris, Montreal; J. A. McRea, Niagara Falls, and others.

BUSINESS NOTES.

Barlow & Budd, plumbers, Montreal, have dissolved partnership.

Duclos & Falstrault, builders, Montreal, have dissolved partnership.

The firm of A. Chayer & Co., contractors, Montreal, has been dissolved.

George Stillwell, painter, has begun business in McAuley, Man.

S. McCallum has commenced a plumbing business at Fort William, Ont.

Mr. J. W. Balmain, has been appointed Municipal Engineer for the Corporation of North Vancouver, B. C.

The firm of Gibault & Proulx, contractors, Montreal, have dissolved partnership.

The partnership of O'Hara & Hawkins, plumbers, Montreal, has been dissolved.

An order for the winding up of the business of the contracting firm of Societe (La) Anonyme de Con-

A. & E. LOIGNON, C. E.
17 Place D'Armes Hill, MONTREAL
REINFORCED CONCRETE CONSTRUCTIONS
FOR
Fireproof Buildings, Hydraulic and Public Works
Steel Structures for Bridges ad Buildings
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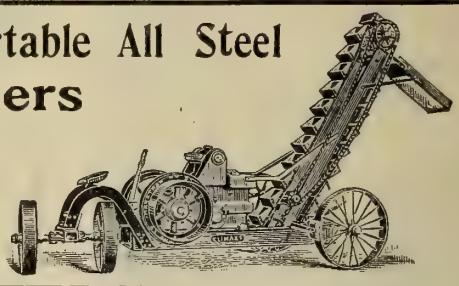
Climax Low Down Portable All Steel
Crushers
3 sizes Portable as per cut.
2 sizes Stationary. Send for 1906 prices.
Climax Road Machine Co.
Hamilton, Canada



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Manufacturers and Jobbers of
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Winnipeg, Man 76 Lombard St.
Vancouver B. C. 615 Pender St.
HEAD OFFICE AND WORKS, OSHAWA, Ont.
He can fill the bill—never mind how small—or large.

struction of Montreal has been granted.

Joseph Lafrance, master plumber, Mount Royal avenue, Montreal, has made an assignment for the benefit of his creditors.

The firm of Howard & Snow, painters, North Battleford, Sask., have been succeeded by Howard, Dean & Co.

The Canadian Pipe Company, of Vancouver, B.C., have completed a new factory required for their increase in trade in the wood pipe business.

Etienne Dussault, J. O. A. Laforest and Horace Dussault, contractors, Levis, Que., have registered their business under the firm name of Dussault, Etienne & Cie.

A number of Toronto and American capitalists are about to form a company for the purpose of exploiting the Latoff system of concrete construction which has been so successful in the United States. A parent company will be formed which will establish subsidiary companies at different points in the Dominion. The headquarters of the concern will be in Toronto, and a charter is now being applied for.

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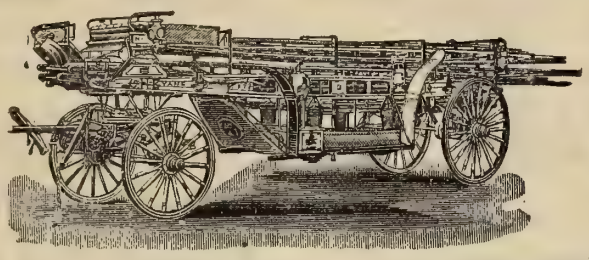

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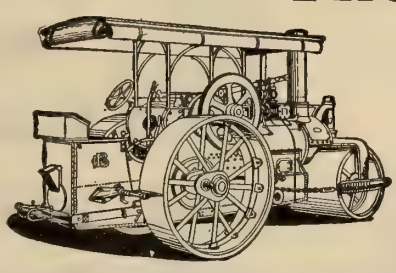

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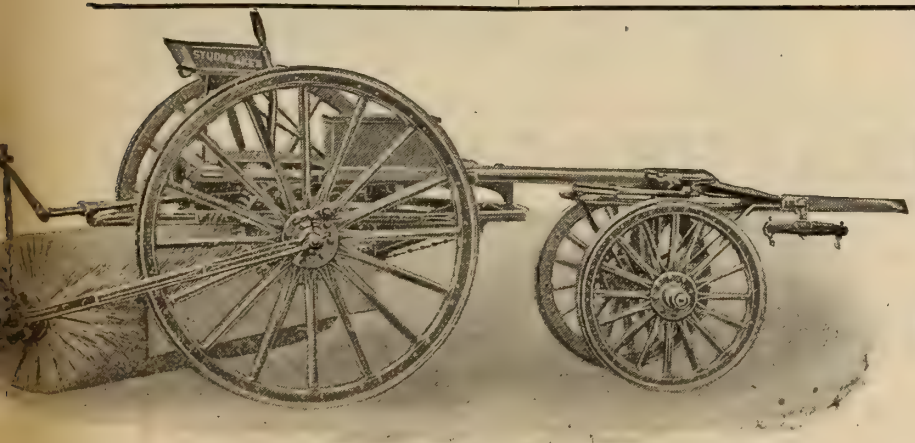

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Studebaker Sprinkler

(PATENT IMPROVED.)

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We also make an . . .

IMPROVED VERTICAL SPRAY for Pavements.

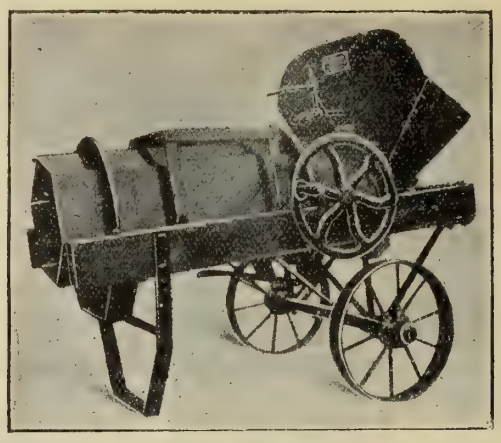
Geo. Heaman, Mnfr., London, Ont

John T. Hawkins, plumber, Montreal, has recently registered his business.

George Alsip, contractor and builder, Winnipeg, Man., is removing to Fort William, Ont., where he has purchased the plant of the Mount McKay Brick & Tile Company and expects to engage extensively in supplying Western trade.

H. McLaren & Co. have become Montreal agents for the Taylor-Forbes Co. and have opened up new sample rooms at 122 Craig street west, in that city, where particular attention is paid to sovereign radiators, lawn mowers and builders' hardware.

The Hand Power Continuous Concrete Mixer



Specially adapted for Sidewalk and Street Work, and all classes of concrete work where a thorough mixture with but small capacity is required.

Other Mixers and Concrete Mixing Machinery.

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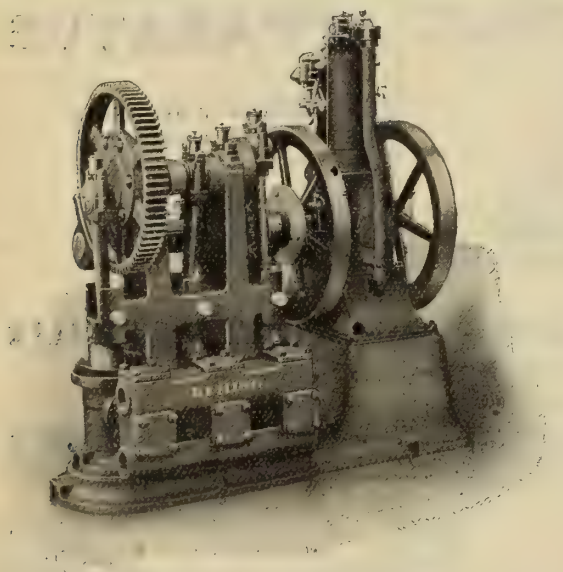

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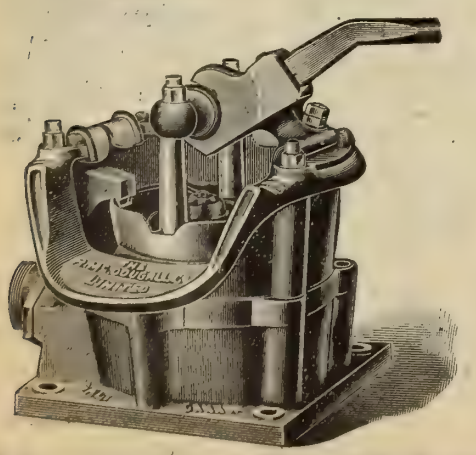

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Our Waggoner extension and other fire ladders are reinforced with steel wire trussing making them at once the **Strongest** and the **Lightest**, as they are the **Cheapest** Firemen's ladders in the market. They are also the **Quickest** operated, a matter of vital moment in firefighting. Our safety lock is the **Safest** and simplest produced. **Clerks, Councils** and **Fire-Chiefs**, write for circular, &c.

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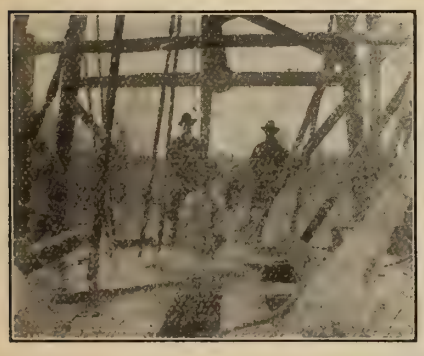

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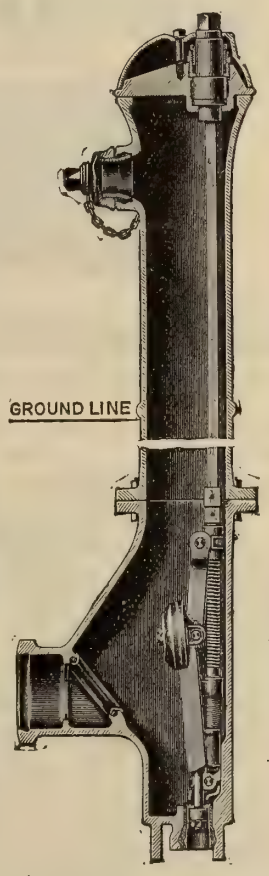

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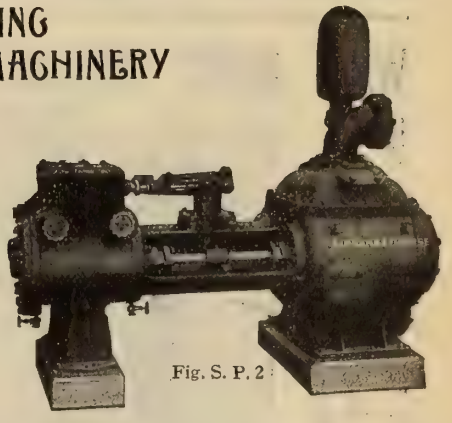

Fig. S. P. 2

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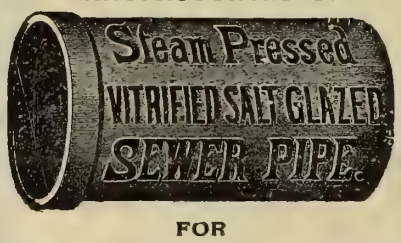

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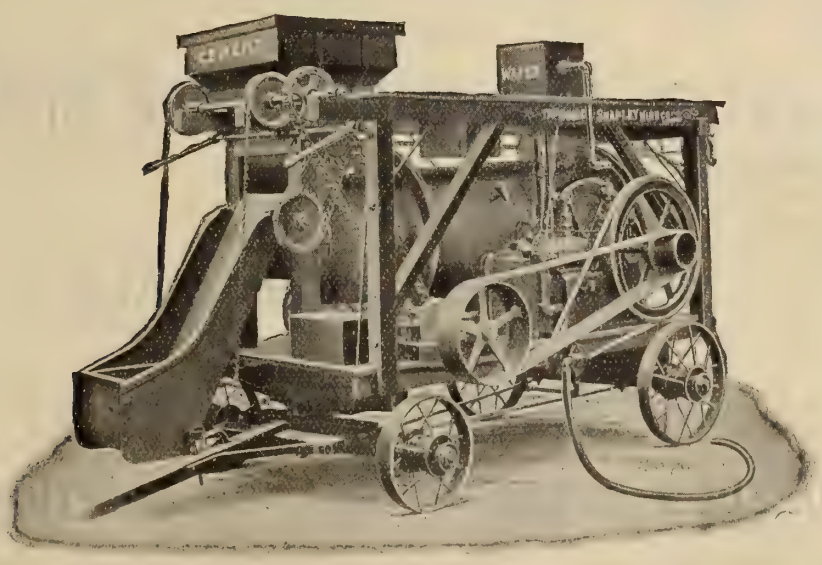

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1 Tug—Length 64 ft.; Beam 14 ft.; Draft of Water 7½ to 8 ft.; Engine 16 in. x 18 in.; Hull rebuilt in 1905.

1 Tug—41 ft. long; 9½ ft. Beam; Draft of Water 5 ft.; Engine 10 in. x 12 in.; Rebuilt in 1906.

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1 Flat Scow—40 ft. x 13½ ft. x 4 ft. Sides.

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CANADIAN

Contract Record

A Weekly Journal of Public Works, Tenders, Advance Information and Municipal Progress

This Paper Reaches Every Week the Town and City Clerks, Town and City Engineers, County Clerks and County Engineers, Purchasers of Municipal Debentures and Leading Contractors In All Lines Throughout Canada

VOL. 17. TORONTO, MONTREAL — MAY 30, 1906 — WINNIPEG, VANCOUVER No. 13

THE CANADIAN CONTRACT RECORD
PUBLISHED EVERY WEDNESDAY
As an intermediate Edition of the Canadian Architect and Builder.

THE C. H. MORTIMER PUBLISHING COMPANY
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Agents wanted throughout Canada for this road. Address The Nash Road, Borough of Brooklyn, N. Y. City, U.S.A.

CITY OF BRANDON

Tenders for

CAST IRON PIPE AND HYDRANTS

Sealed tenders will be received by the City of Brandon until 12 o'clock noon on MONDAY, JUNE 18TH, 1906, for furnishing the following supplies:

150 Ton of 6 inch C.I. Pipe and Specials;
15 Hydrants.

Specifications and conditions of tendering may be obtained on application to the undersigned

The lowest or any tender not necessarily accepted.

W. H. SHILLINGLAW,
City Engineer.

Brandon, Man., May 10th, 1906.

TENDERS

Specifications, covering the equipment required for enlarging the Electric Light Plant of the Corporation of Barrie, Ont., consisting approximately of water tube boilers, direct connected engine and generator of four hundred and fifty horse power capacity, switchboards, piping, condensers, heaters, pumps, economizers, etc., etc., and a series alternating street lighting system, are under preparation and will be ready about JUNE 1ST, 1906, after which date they may be seen at the office of the undersigned. Sealed tenders will be required within ten days of the issuing of the specifications.

The lowest or any tender not necessarily accepted.

K. L. AITKEN,
164 Bay St., Toronto. Consulting Engineer.

Tenders Wanted

$10,000 Debenture Bonds For Sale

Tenders will be received up to JUNE 1ST, 1906, for the purchase of Electric Light Debentures of the Town of Picton, in amount $10,000. Full particulars furnished on application. Address

R. A. NORMAN,
Clerk Town of Picton.

Bridge Construction

Sealed Tenders, marked "Tenders for Bridges," will be received by the undersigned up to MONDAY, 18TH JUNE 1906, at 12 o'clock noon for the excavation, masonry work, grading, etc., and for steel superstructure (such Tenders to be separate) for the construction of two County Bridges, viz:

(a) "Grant's Bridge, over South Branch of River Aux Raisins at or near Grant's Corners.

(b) The "McRae" Bridge over Payne River where same crosses Roxborough—Finch boundary.

The tenders for superstructure to be accompanied by blue prints showing style of steel bridge proposed,

Forms of tender for substructure and all particulars as to measurements, quantities, etc, will be furnished upon application to the undersigned, and the specifications as to sub-structure and plans, etc., may be inspected at the offices of the undersigned, or of W. H. Magwood, C. E., Cornwall, the engineer in charge.

A certified cheque for 10 per cent. of amount of tender to accompany same,

Lowest or any tender not necessarily accepted.

ADRIAN I. MACDONELL,
Counties' Clerk, S. D. & G., Cornwall, Ont.
Cornwall, May 15, 1906.

NOTICE TO CONTRACTORS

Sealed tenders, marked "Tenders for Bridges" and addressed to the undersigned Engineer, will be received up to 12 o'clock, noon, of FRIDAY, THE 8TH DAY OF JUNE, A. D., 1906, for the furnishing of materials for and construction of:

(a) Two cement concrete bridge abutments with wing walls consisting of about 125 cubic yards, 1, 3, 5 mixture.
About 250 yards of excavation.
(b) 400 cubic yards of earth grading.
70 cubic yards of gravel and broken stone grading.
c) 150 square feet of rip-rap wall 18 inches thick.
825 square feet of rip-rap wall 2 feet thick.
(d) 116 lineal feet of 5 foot plank walk with railings requiring 520 feet of 1½ inch gas pipe.
2,000 pounds of cast iron posts and all necessary plank and cedar sills.

Said works to be built at Winchester Springs in the County of Dundas and Province of Ontario.

Plans and specifications may be seen at the office of the undersigned.

A certified cheque, payable to the Treasurer of the United Counties of Stormont, Dundas and Glengarry, for 5 per cent. of the amount of the tender, must accompany each bid.

The lowest or any tender not necessarily accepted.

Tenders may be submitted on any or all of the four parts mentioned above.

THOS. H. DUNN,
Engineer in Charge, Winchester, Ont.
EDWARD WALSH
Chairman of Committee, Dunbar, Ont.
Winchester, May 14th, 1906.

ARCHITECT'S ASSISTANT—English training, age 23; desires immediate engagement. Write for interview. Apply Box 81, CONTRACT RECORD, Toronto.

TENDERS

The undersigned will receive tenders up to 7 o'clock p. m. on the 4TH DAY OF JUNE, 1906, for the construction of Cement Walks in Town of Waterloo during 1906.

A marked cheque for $50.00 must accompany each tender as a guarantee of good faith. For specifications and further information, apply to the undersigned.

A. B. McBRIDE, Town Clerk,
Waterloo.

Tenders Wanted

Sealed tenders will be received by the undersigned, up to JUNE THE 9TH, 1906, for the Seating and Leaded Glass Windows required in the Eastern Methodist Church, Napanee, Ont

Plans, specifications and further particulars will be furnished on application to the undersigned.

The lowest or any tender not necessarily accepted.

W. F. HALL,
Secretary of Building Committee.
Napanee, Ont., May 11th, 1906.

CITY OF MOOSE JAW, SASK.

Tenders for Public Works

Sealed tenders will be received by the under signed, marked "Tenders for Sewers," up to MONDAY, JUNE 4, 1906, at 5 o'clock p. m., for the laying of approximately 3,861 feet of 8" and 1574 feet of 10" Sanitary Sewers, also 1008 feet of 8" and 4435 feet of 6" Wood Stave Water Main.

The lowest or any tender will not necessarily be accepted.

Plans and Specifications can be seen at the office of the City Engineer.

JOHN D. SIMPSON,
Secretary-Treasurer.

CITY OF MOOSE JAW, SASK.

Tenders for Granolithic Sidewalks

Sealed Tenders will be received by the undersigned, marked "Granolithic," up to MONDAY, JUNE 4TH, 1906, at 5 o'clock, p. m., for the construction of approximately 58,878 Super. feet of walk.

PLANK WALKS.

Also sealed tenders mrrked "Plank Walk," for approximately 5,526 lin. feet of 4 foot wide walk.

Particulars can be had on application at the office of the City Engineer.

The lowest or any tender will not necessarily accepted.

JOHN D. SIMPSON,
Secretary-Treasurer.

[FOR ADDITIONAL ADVERTISEMENTS FOR TENDERS SEE NEXT PAGE.]

TENDERS

Sealed tenders, in bulk or separate, will be received by the undersigned up to 6 p.m., the 5TH DAY OF JUNE, for the erection and completion of a stone and brick church at Moose Jaw, for the Methodist congregation of the said place. Plans are to be seen at the office of the architect, Winnipeg and also at the office of Wm. Grayson, Esq., secretary-treasurer of church board, Moose Jaw.

The lowest or any tender not necessarily accepted. Bids to be accompanied by a marked cheque for 2½ per cent of the amount of tender. For any other particulars apply to

JAMES CHISHOLM, Architect,
Wilson Building, corner McDermot and Albert Streets, Winnipeg.

SEALED TENDERS

will be received by Charles E. Grant, the Town Clerk, at his office, Town Hall, Orillia, Ont., until 12 O'clock noon, MONDAY, JUNE 11TH, 1906, for the construction of a

CONCRETE DAM

at Ragged Rapids on Severn River near Orillia, Ontario.

Plans and specifications may be seen on and after Monday, May 28th, in the office of the Town Clerk, Orillia, Ont., and the office of the Engineers, McDougall & McRae, Room 55 Citizen Building, Ottawa, Ont.

Lowest or any tender not necessarily accepted.

Papers printing this notice without proper authority shall not be paid.

Town of Fort William

Board of Water and Light Commissioners

Sealed bids will be received by the undersigned at the office of the Commissioners, Fort William, Ont., Canada, until 7 p.m. the 7TH DAY OF JUNE, 1906, for the Construction of Section 1 of the Loch Lomond Water Supply, with branch for temporary supply to Crescent Lake. The work comprises:

Two earth dams with intake pipe.

2,000 feet of 8 inch wood supply main.

Concrete lined reservoir of 800,000 gallon capacity.

10,000 feet of 18 inch wood pressure main.

10,000 feet of cast iron pipe from 18 inches to 10 inches diameter.

The laying of a duplicate 18 inch cast iron main under the Kaministikwia River 350 feet wide, 28 feet deep with all necessary valves, specials, road making, clearing, etc.

Specifications and form of proposal may be obtained and plans inspected at the office of the Engineer, Town Hall, Fort William.

A certified cheque for ten per cent. of the amount of the bids must accompany the proposal form.

The right is reserved to reject any or all bids, or to accept any tender which appears advantageous to the Commissioners.

A. McNAUGHTON, Secretary.
H. S. HANCOCK, Jr., Engineer.
Fort William, May 14th, 1906.

CITY OF WINNIPEG

Tenders for Garbage Incinerator

Sealed tenders addressed to Ald. Chris. Campbell, chairman Health Committee, for supply and erection complete of a garbage and night soil incinerator for the City of Winnipeg, of a capacity of 140 tons per day, will be received at the office of the undersigned up to 3.30 p. m.

THURSDAY, JUNE 21, 1906

Full description, plans and specifications of the plant must accompany each tender. All information required will be furnished by Dr. A. J. Douglas, Medical Health officer, Winnipeg.

Each tender must be accompanied by an accepted cheque payable to the order of the City Treasurer, or cash deposit for a sum equal to 5 per cent. of the total amount of the tender, which will be subject to forfeiture in case of failure on the part of the contractor to enter into a written contract, with approved sureties if called upon to do so.

The city reserves the right to reject any or all tenders or to accept any bid which appears advantageous to the City of Winnipeg.

C. J. BROWN, City Clerk.

City Clerk's Office,
Winnipeg, May 19, 1906.

CITY OF REGINA

TENDERS FOR

ELECTRIC LIGHT MACHINERY

The Corporation of the City of Regina will receive tenders until JULY 2ND, 1906, for the supply of a 100 k.w., 3 phase, 2200 volt, 300 r.p.m., revolving field generator, direct connected to a 150 h. p. automatic cut-off engine, with direct connected exciter, one generator panel and one feeder panel, with instruments and controlling switches, etc. Specifications may be obtained by applying to the City Clerk, City of Regina.

J. KELSO HUNTER, City Clerk.

Regina, 22nd May, 1906.

Tenders For Debentures

City of St. John, New Brunswick

Tenders, addressed Treasury Department, City of Saint John, Province of New Brunswick, and marked "Tenders for Debentures", will be received by the undersigned, up to 12 o'clock noon, on the TWENTY-EIGHTH DAY OF JUNE, 1906, for the purchase of Seven Hundred and Twenty-One Thousand ($721,000) Dollars "Saint John City Debentures", to be issued by the City of Saint John, payable at the expiration of forty years, with interest at four (4) per cent. per annum, payable half yearly, from the first day of May, 1906. Principal and interest may be payable at Chamberlain's office, in Saint John, New Brunswick, or in Great Britain or elsewhere.

The Debentures may be expressed in sterling money of Great Britain, in currency of Dominion of Canada, or in the currency of any Foreign Country, and in sums not less than Five Hundred Dollars each as purchaser may desire.

Resolutions passed by the Common Council of the City of Saint John provide for the formation of a Sinking Fund for the redemption of these Debentures at maturity.

Parties tendering must state in their tender in what currency, in what sums and where they desire the Debentures and Interest to be made payable.

The highest or any tender not necessarily accepted.

By order of the Treasury Department of Common Council.

HERBERT E. WARDROPER,
Common Clerk,
City of Saint John, N. B.

Prospectus in connection with above loan may be obtained on application.

TENDERS FOR

Drainage Works

The corporation of the Township of Cavan will receive sealed tenders marked "Tenders for Drainage Works," and addressed to John J. Fair, Millbrook P. O., up to noon of WEDNESDAY, 27TH DAY OF JUNE, 1906, for the construction of Drainage Works a distance of about seven miles through the Townships of Cavan and North Monaghan, according to plans and specifications made by John E. Belcher, Engineer, which may be seen at the office of John J. Fair, Township Clerk, Millbrook.

Each tender must be accompanied by an accepted cheque drawn upon any chartered bank in Canada, payable to the order of "The Treasurer of the Township of Cavan," for the sum of $500, or in lieu thereof a cash deposit of said amount, which will be subject to forfeiture in the event of failure on the part of the Contractor to enter into a satisfactory written contract when notified to do so.

The contractor whose tender is accepted will be required to furnish a bond of $2,000 satisfactory to the Township Council, and the Contractor will also be required to enter into a special covenant not to unnecessarily interfere with or endanger public traffic on the township highways during the construction of the works.

The Township Council reserve the right to reject any or all tenders or to accept any bid which may appear advantageous to the Township of Cavan.

JOHN J. FAIR, Township Clerk,
Milbrook, Ont.

Dated at Millbrook this 28th May, 1906.

John T. Hawkins, plumber, Montreal, has recently registered his business.

CITY OF STRATFORD

Sealed tenders addressed to S. J. Mallion, Chairman of the Committee of Works, and endorsed "Tenders for Concrete Walks," will be received up to 12 o'clock noon, JUNE 5TH, for the construction of approximately 7,600 square feet of Concrete Walk.

Plans and specifications may be seen at the City Engineer's office and instructions and forms of tender may be obtained on application.

Each tender must be accompanied by a marked cheque payable to the City Treasurer for the amount called for in the form of tender.

The lowest or any tender not necessarily accepted.

W. R. W. PARSONS,
City Engineer.

NOTICE TO CONTRACTORS

Sealed tenders addressed to George Quart, Esq., Township Clerk, Winchester, Ont., will be received up to 12 o'clock, noon, of the 8TH DAY OF JUNE, A. D., 1906, and publicly opened at Chesterville on the 9th day of June, A. D., 1906, at 2 o'clock in the afternoon, for the construction of the following drainage works in the Township of Winchester:

STONEY CREEK DRAIN.

Main Drain—Total estimated excavation is 6,030 cubic yards.

Devanny Branch—Estimated rock excavation, 151 cubic yards.

Devanny Branch—Materials other than rock, 6,400 cubic yards.

South Branch—Estimated excavation is 3,500 cubic yards.

STONEY CREEK EXTENSION DRAIN.

Total estimated excavation is 11,800 cubic yards.

Separate bids are required on each portion. Contractor to give price per yard for all materials not classed as rock and also price per yard for rock.

Each bid must be accompanied by cash or a marked cheque, payable to the Treasurer of the Township of Winchester, for 5 % of the amount of the tender. A separate cheque must be enclosed for each portion bid on.

Intending bidders are requested to examine the site of the proposed works before submitting tenders.

Plans and specifications may be seen at the office of the undersigned Engineer.

The lowest or any tender not necessarily accepted.

ROBT. FRASER, Reeve, Morewood, Ont.
THOS. H. DUNN, Engineer in Charge, Winchester, Ont.

CONTRACTS OPEN.

HARROW, ONT.—C. Clark is having plans prepared for a new business block.

PORT ELGIN, ONT.—A by-law will be voted on June 4th to raise $30,000 for waterworks system.

WAUCHOPE, SASK. — The Imperial Elevator Co. purpose erecting an elevator here this summer.

NORTH BAY, ONT.—D. St. Pierre intends building a business block on the site of his present building.

SYDNEY, N.S.—J. Ross, of Montreal, President of the Dominion Coal Co., is looking for a site for a residence.

SEAFORTH, ONT.—A by-law will be voted on to loan $10,000 to the Willis Shoe Co. to establish a factory here.

KENORA, ONT.—H. B. Rugh, architect, Winnipeg, is preparing plans for a three-storey brick hotel for G. Pagen.

SHALLOW LAKE, ONT.—J. M. Chisholm has taken tenders for erection of an addition to public school building.

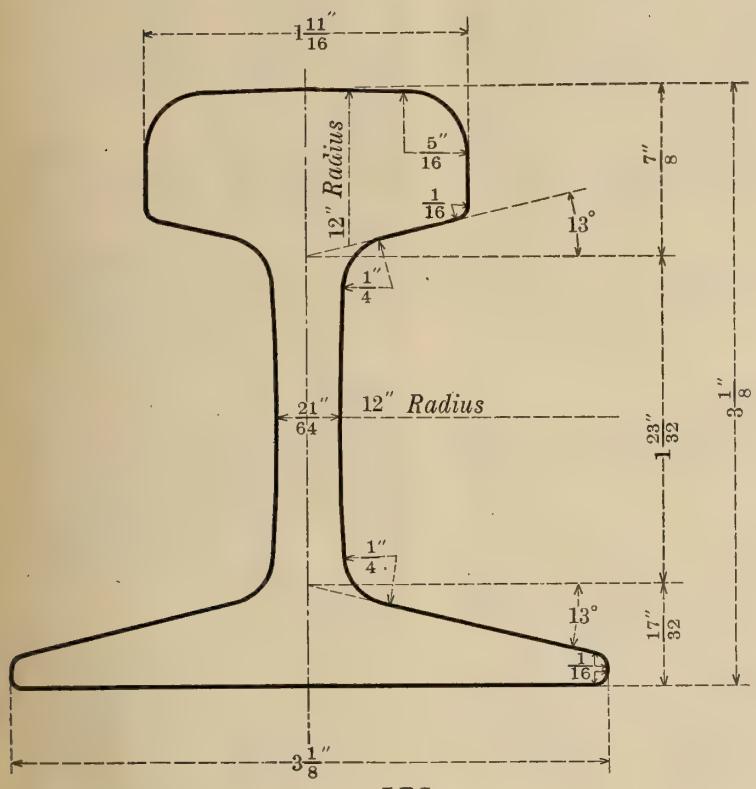
FREDERICTON, N. B. — T. G. Loggie is preparing to erect a large residence on the site of his present building.

BATTLEFORD, SASK. — A new steel bridge has been included in the estimate of the Legislature, cost $200,000.

MEAFORD, ONT.—The congregation of the Methodist church are considering the erection of a new building here.

REVELSTOKE, B.C.—R. H. Howson has had plans prepared for furniture and undertaking establishment for the firm which he represents, cost $40,000.

LIGHT RAILS



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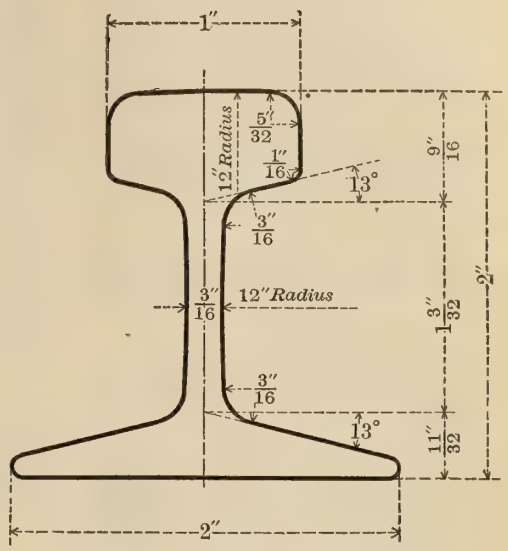

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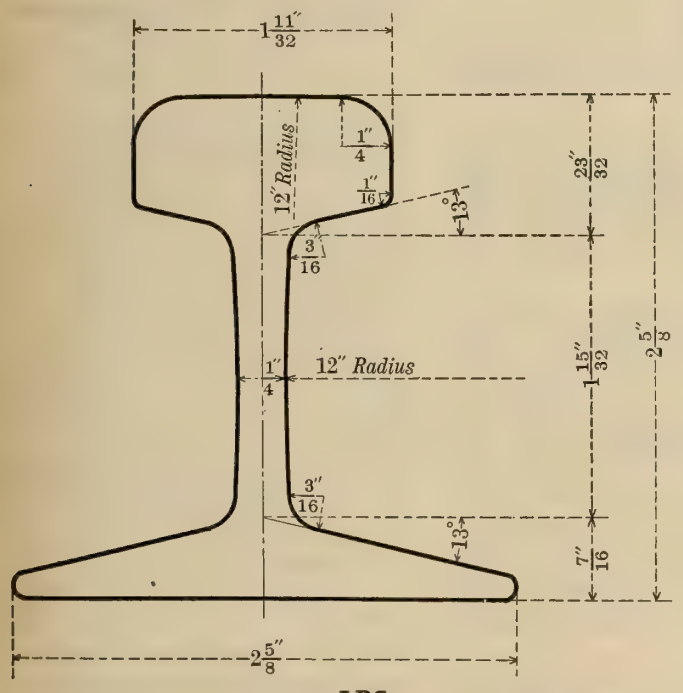
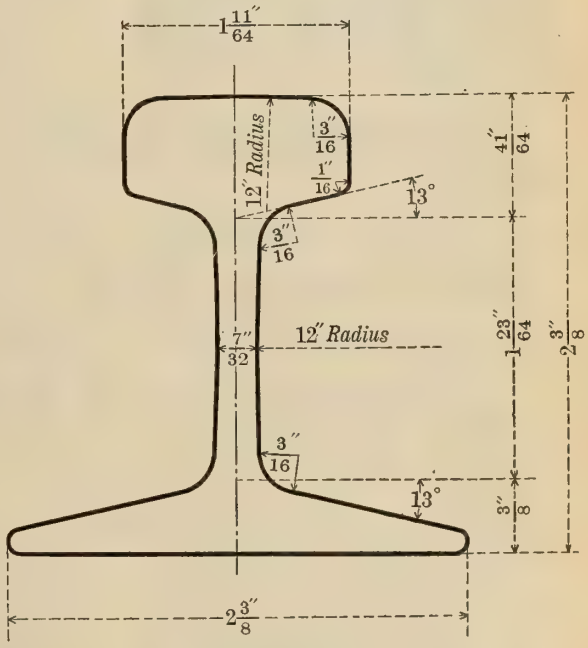


20 LBS.



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MONTREAL

GODERICH, ONT.—Architect Fowler has prepared plans for alterations in the Jordan block for the Sovereign Bank.

FOREST, ONT. — R. Kerr, town clerk, will receive tenders up to June 4th for construction of the Miles-Walker drain.

FERGUS, ONT.—W. Ross, Village Clerk, will receive tenders up to June 2nd for laying of cement pavement in the village.

TREHERNE, MAN. — Hooper & Walker, architects, Winnipeg, are preparing plans for the new Presbyterian church.

CALEDONIA SPRINGS, ONT. — A new bottling plant is to be erected here by the Canada Mineral Waters, Limited.

DAUPHIN, MAN.—J. W. Johnston will receive tenders up to June 15th for construction of granolithic sidewalks in the town.

CLINTON, ONT.—Plans have been prepared for alterations in the Sovereign Bank premises here by architect Fowler, of Goderich.

BANFF, ALTA.—Lawson & O Gara, architects, Calgary, are preparing plans for new residence for W. J. G. Stephen, to cost $6,000.

ORANGEVILLE, ONT. — A committee has been formed to select a site and erect building for the Carnegie library, cost $8,000.

GALT, ONT. — Engineer Davis recommends macadamizing of Queen street west, also that tenders be called for the pumping station.

DIDSBURY, ALTA. — Lawson & O'Gara, architects, Calgary, are receiving tenders for new building for Union Bank of Canada.

PEMBROKE, ONT. — The Town Council gives notice of its intention to construct granolithic sidewalks on Mary and Albert streets.

SOURIS, MAN.—C. W. Miller has taken tenders for the erection of a brick and stone church building for the Methodist congregation.

BILLINGS BRIDGE, ONT. — H. B. Billings will receive tenders up to June 2nd for alterations and additions to the Township Hall here.

PRESTON, ONT. — The Council have decided to submit the question of constructing waterworks and sewer systems to a vote of the ratepayers.

MELFORD, SASK. — The Imperial Oil Co. will build an elevator this season. —Dr. Humphries, Dr. Shadd and Mr. Rattan will erect new buildings.

ANNAN, ONT.—J. Cannon, township clerk, will receive tenders up to June 9th for building concrete abutments for bridge in the township of Sydenham.

WELLAND, ONT.—A site has been secured for the building of the Ontario Iron & Steel Co.—It is expected that the Berlin Machine Works will be established here soon.

KINGSTON, ONT. — The Ontario Government has granted $50,000 towards the erection of the biological building for Queen's Medical School. Power & Son, architects.

GRANDVIEW, MAN.—W. Dickie will receive tenders up to June 1st for the erection of a four-roomed brick school in Berry Hill school district. F. R. Evans, Winnipeg, architect.

STRATFORD, ONT. — W. R. W. Parsons, City Engineer, will receive tenders up to June 5th for construction of concrete walks on Brunswick, Argyle and Douro streets.

PARRY SOUND, ONT.—E.E. Armstrong, town clerk, will receive tenders up to June 5th for construction of a sewer under the Parry Sound road from Montgomery hotel to the harbor.

HALIFAX, N.S. — M. McF. Hall, City Hall, has taken tenders for construction of an office and entrance building on the grounds of the Provincial Exhibition. H. E. Gates, architect.

NORTH TORONTO, ONT. — Mr. Sinclair, contractor, of Vancouver, B.C., has estimated that three septic tanks costing $3,500 each would be required for the sewage system of the town.

WETASKIWIN, ALTA. — Tenders have been taken for the erection of a new building for the Canadian Bank of Commerce.—J. H. Knight, architect, has taken tenders for erection of a brick residence.

BRANTFORD, ONT.—The Public School Board have decided to enlarge Darling and Huron street schools, cost $45,000.—Plans for the new golf club house have been prepared, cost about $3,500.

CAMPBELLTON, N.B. — T. Maccolm has been granted a charter by the Dominion Parliament to build a bridge across the Restigouche River at Christopher's Point, 3,200 feet long, cost about $600,000.

PORTAGE LA PRAIRIE, MAN.—It is understood that the new Midland station will be erected on Campbell street.—The School Board have decided to issue $15,000 of debentures for improvements in the school buildings.

NEW WESTMINSTER, B. C.—C. H. Clow, architect, has taken tenders for the erection of a two-storey cottage on Third street.—J. F. Hart, real estate dealer, intends erecting a residence on the Hastings road near Burnaby lake.

TORONTO JUNCTION, ONT.—Building permits have been issued to E. Watson for two-storey brick veneer house on Gilmore avenue, cost $1,700, and to C. R. Cumming for two-storey stone and brick dwelling on Willoughby avenue, cost, $4,000.

PRINCE ALBERT, SASK. — The Legislature is appropriating $50,000 towards the cost of enlarging the C.N.R. bridge.—W. Chipman, C.E., Toronto, has reported on the cost of moving the electric light plant and making improvements, cost $35,000.

SAULT STE. MARIE, ONT. — F. Gelinas, Department of Public Works, Ottawa, will receive tenders up to June 13th for dredging in the St. Mary river. Plans with J. G. Sing, Confederation Life Bldg., Toronto, at Post Office here and at above named office.

QUEBEC, QUE.—Plans for the new Bank of Montreal building, corner St. Peter and St. James streets, are completed.—It is expected that the National Transcontinental Railway Commission will call for tenders for construction of the line from this city to Moncton, N.B., in a few weeks.

OWEN SOUND, ONT.—F. Lyons will erect a three-storey building corner of Russell and Marsh streets. — Plans have been prepared for the new post office building, cost $75,000.—The congregation of First Methodist church have decided to sell their parsonage and erect a new one. B. Allan is interested.

ORILLIA, ONT. — The Roman Catholic congregation are preparing for erection of a new church, cost $40,000. —Subscriptions are being taken for a new hospital building, cost $15,000.—T. W. Robins will receive tenders up to June 2nd for erection of an agricultural hall for the East Simcoe Agricultural Society.

ST. JOHN, N. B.—The Isaacs building has been leased by a wholesale drug company and will be remodelled for their use.—The ladies of the city are taking subscriptions for a new school building in the north of the city for kindergarten work.—The Central Telephone Company is expected to establish an exchange here.

SASKATOON, SASK.—The Legislature has appropriated $100,000 for the erection of a new steel bridge here.—The City Council have purchased a site on the river front for a power plant.—The plans of Architect Cordery have been accepted for addition to the school building.—A site for a new school in Riverdale has been bought.

LONDON, ONT.—H. C. McBride, architect, has taken tenders for the erection of a brick warehouse on King street for J. Fraser.—It is understood that the Traders' Bank wish to secure the building on Richmond street formerly occupied by the Canadian Saving & Loan Co. for bank premises.—The congregation of All Saints church have decided to erect a new building, cost about $8,000.

BURK'S FALLS, ONT. — The Burk's Falls & French River Railway Co. give notice that they will apply to Parliament for power to construct and operate a railway from this town to the French river.—The Magnetawan River Railway Co. give notice that they will apply to the Railway Commissioners of Canada to construct a branch line from a point south of High street to the premises of Knight Bros.

CALGARY, ALTA.—The Bell Telephone Co. have purchased a site for central office building.—Capitalists of Indian Territory will erect a three-storey office building.—The Imperial Bank purpose enlarging their present building.—Lawson & O'Gara, architects, are receiving tenders for residence for S. Skeed, to cost $8,000. Same architects are preparing plans for addition to Holy Cross Hospital, to cost $30,000.

MAPLE CREEK, SASK.—The Bank of Commerce intends building a new branch office here.—The C. P. R. estimates that the cost of water pipe from Hay Creek to the town will be $44,000. —The town is making application for water rights from Saunders Springs, on Hay Creek, and the granting of same is practically assured. Within a year a vote will likely be taken to decide on the immediate construction of a pipe line from the springs to the town.

VANCOUVER, B. C.—J. P. Howe, of Seattle, purposes erecting a new theatre building.—The owners of the Vancouver opera house are considering the remodelling of that building.—M. C. Merrill proposes to erect a four-storey apartment house here, cost $70,000.—Mr. Farrell is preparing to erect a three-storey apartment building, corner Granville and Robson streets.—Plans have been prepared for a new hotel for D. W. Kells at the Capilano dam, cost $5,000.

HAMILTON, ONT.— S. H. Kent, City Clerk, will receive tenders up to June 1st for construction of pipe sewers on Burlington, Bay, Harriet, Hughson, McNab and Strachan streets.—Stewart & Witton, architects, have prepared plans for three-storey building for the Jackson Visible Typewriter Co.—The Board of Works have decided to replank the high level bridge, cost $3,000.—A new bridge across the Desjardins canal for the Hamilton & Guelph Railroad is proposed to be built.

FORT WILLIAM, ONT. — J. C. Stinson, architect, has taken tenders for the erection of a brick veneer dwelling for A. MacDonald. — The Western Elevator Co. have arranged with the town for a site for a large elevator.—Building permits have been issued as follows :—W. Black, brick veneer hotel,

Gore street, cost $15,000; Hamilton & Fregeau, brick veneer dwelling, John street, cost $3,000; Thomas Dow, brick dwelling, Archibald street, cost $3,500; M. A. Smith, Baptist church Sunday school, solid brick, Donald street, cost $8,000; L. L. Peltier, solid brick business block, May street, cost $5,000.

BARRIE, ONT. — The by-law for $27,000 to enlarge the electric light plant was carried on May 18 by a large majority. The new equipment will consist of water-tube boilers, a four hundred and fifty horsepower Corliss valve engine, direct connected to a two phase, 2200 volt, revolving field generator, necessary switchboard apparatus, piping, condensers, heaters, pumps, economizers, etc., and a series alternating street lighting system. Specifications will be ready about June 1, and tenders will probably be received not later than ten days after that date. Mr. K. L. Aitken, 164 Bay street, Toronto, is consulting engineer.

EDMONTON, ALTA.—The Alberta Pacific Elevator Co. purpose erecting a large elevator this summer.— Building permits have been issued as follows:—John Hall, residence Heiminck street, $1600; John Regan, residence Twelfth street, $5,000; T. H. Jones, residence Eighth street, $4,000; S. H. Muttard, residence Namayo street, $3,400; Mrs. O. H. Bush, residence Eighth street, $7,500; G. H. Thomas, residence Fifth avenue, $3,000; S. Nance, residence Isabel street, $1600; John Stocks, residence Third avenue, $5,000; C. R. Fitness, residence Eighth avenue, $3,000. —It is expected that a large addition will be built to Alberta College.—A. Cristal has plans prepared for a three-storey block building.—Calhoun & Ferguson purpose building a four-storey hotel corner of Athabaska and First streets.

MONTREAL, QUE.—Sir W. C. McDonald will build a brick and stone warehouse, corner of Dufresne and Lariviere streets, cost $49,000.—J. Ouinet is preparing plans for a new theatre building proposed to be built on St. Catharines street.—The Association of Butchers wish to procure a site from the Delorimier Council for an abattoir building.—The Canada Smelting & Refining Co. are preparing to erect new furnaces for refining and smelting copper zinc.—The City Surveyor will estimate on cost of improvements on Shearer and Canning street.—Sherwin & Williams will erect a factory on Atwater street, to cost $20,000.—The Dominion Guarantee Company will erect a stone store building on St. James street, to cost $50,000.—The Canadian Bronze Co. are preparing to erect a factory on Delorimier ave., to cost $22,000.—The Bell Telephone Co. purpose building an exchange on Mountain street, to cost $23,000.—A new church is to be erected for the Fabrique Ste. Philomine, to cost $10,800.

OTTAWA, ONT.—L. K. Jones, Department of Railways and Canals, will receive tenders up to June 15th for construction of concrete superstructure for the wooden piers at the entrance of the Murray canal and for reinforced concrete bridges to span openings between piers. Plans at the office of the Chief Engineer of Railways and Canals and with the Superintendent of Operation, Cornwall. —The Separate School Board have purchased a site on Friel street for a new French school, cost $12,000. F. M. Hamel, architect, is preparing plans.—Building permits have been issued as follows: A. E. Shaver and D. O'Connor, three brick veneer dwellings, Elgin street, $9,000; brick veneer double house, Elgin street, $4,000; four brick veneer dwellings, Lyon street, $10,000; F. Warwick, solid brick dwelling, Laurier avenue, $6,000; C. F. Gamble, brick veneer dwelling, Flora street, $3,000; J. Hesser, brick veneer dwelling, Elgin street, $2,000; John Manuel, skating and curling rink,

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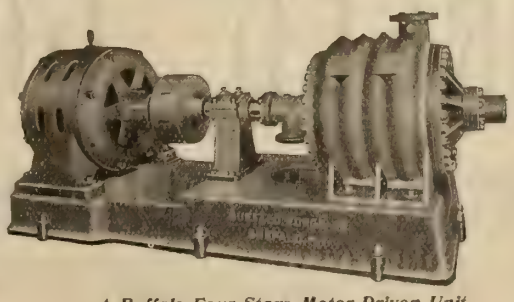
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Vittoria street, $10,000; John McLaurin, two brick shops, Rideau street, $4,000; Jos. Betourney, brick veneer dwellings and shop, Division street, $4,000, E. L. Burgess, brick veneer double house, First avenue, $4,500; Mrs. Eliza Bayley, brick and double house, Lewis street, $4,000.

WINNIPEG, MAN.—H. B. Rugh, architect, has taken tenders for erection of a residence on Wellington Cresent for G. W. Erb. The same architect is receiving tenders for apartment house on Kennedy street, cost $28,000.—D. Smith, architect, is preparing plans for a four-storey hotel, corner Main and Henry streets, for G. Bernhardt.—Dr. S. Scoble purposes remodelling his residence.—G. Teeter, architect, is preparing plans for a brick residence in Riverview for M. J. Dalton, cost $8,000.—D. Habb purposes erecting a brick residence in Fort Rouge, cost $8.000, for W. Bell. — H. Matthews, architect, is preparing plans for the foundry and shops of the Meisle Manufacturing Co.—V. Barton, architect, is preparing plans for a three-storey brick and stone hotel in Elmwood for S. Cruikshanks.—The plans of Hooper & Walker, architects, for new jail building at Fort Rouge have been accepted and tenders will soon be taken, cost $100,000. —R. A. McCready, of the Northern Iron Works, has purchased a site in Elmwood for foundry building for that company.—J. D. Achison, architect, has prepared plans for a block on Portage avenue for Mrs. Hample, cost $45,000.—Tenders will be received by the Fire, Water & Light committee up to June 4th for supply of water pipe and specials for the city Waterworks.—E. R. Warkman, architect, has taken tenders for erection of a dwelling on Chestnut street.—Blair & Northwood, architects, have taken tenders for erection of a store and apartment building on Lydia street for L. Lanchmin.—The G.T.P.R., the National Transcontinental Commission and the C.N.R. have agreed on the erection of a Union station on Main street.

TORONTO, ONT.—Tenders will be received up to June 5th by the Board of Control, for the construction of the following works: Asphalt pavements on Jarvis, Adelaide and James streets; brick pavement on Wellington street and macadam on Wellesley street; paving track allowances on Dupont, Berkeley and Duke streets and Lansdowne avenue; sewer construction on Brock avenue, also a number of sidewalks.—A blast furnace company wishes to procure a site near the mouth of the Don for a factory building.—The Chapman Double Ball Bearing Co. have purchased a site on Sorauren avenue for factory building. —Plans are being prepared for new lodge rooms on Broadview avenue for the I.O.O.F.—Tenders will be received up to June 1st at 48 Wright avenue for erection of store and dwelling.—Tenders are being taken for erection of a house on Concord avenue. Plans at 96 Dundas street. T. A. Fowler, architect.—Tenders will be received at 411 Ontario street for excavating and building three cellars and cement floors and brick cladding of fronts of houses.— St. John's Presbyterian church are having plans prepared for a new building, corner Simpson and Broadview avenues, cost about $30,000.—The Bell Telephone Co. purpose building two new exchange buildings, one at the corner of Oxford street and Belleveu avenue, the other on Lee avenue north of Queen street.—The C. P. R. and G. T. R. engineers have agreed on the plan of the high level bridge at the Don crossing.—North Parkdale Methodist congregation is preparing to build a new church, corner Galley and Sorauren avenues.—Wesley Methodist church purposes building a new school room.—Wickson & Gregg, architects, are receiving tenders for erection of residence for J. C. Eaton, cost about $40,000. — Plans have been prepared for new lodge building and stores for Ashlar Lodge, cost $35,000.—Building permits have been issued as follows: A. Robinson, 2-storey brick and stone dwelling, Boustead ave., near Roncesvalles, cost $2,100; J. Walmesley, 2½-storey brick dwelling, Roxborough street, near Scarth road, cost $4,200; C. E. Story, 2-storey and attic stone and brick dwelling, Palmerston boulevard, cost $4,500; R. C. Vaughan, 2-storey and attic brick dwelling, Madison ave., near Dupont street, cost $4,000; G. Knowles, 2-storey brick dwelling, Hewitt ave., cost $2,500; R. Holman, 2½-storey brick

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dwelling, Howard Park ave., cost $2,200; H. C. Jarvis, 2-storey brick dwelling, Glen road, near Dale ave., cost $6,000; S. R. Dixon, 2-storey brick and stone dwelling, Roncesvalles ave., near Boustead, cost $2,700; W.G. Greer, 2½-storey brick and stone dwelling, Palmerston boulevard, cost $5,000; M. McTaggart & Son, pair 2-storey and attic brick dwellings, Grace street, near Arthur, cost $5,600; W. Stolley, two 2-storey and attic brick dwellings, 32 Tranby ave., cost $6,000; D. B. Bowerman, pair 2-storey brick dwellings, 116-8 Vermont ave.,cost $4,000; and 2-storey and attic brick dwelling, Vermont ave., near Palmerston, cost $2,100; A. McPherson, 1½-storey brick dwelling, Radford street, cost $2,000; A. Reid, 2-storey brick dwelling, Radford street, cost $2,700; W. J. Hambly, 2½-storey frame dwelling, Hambly ave., near Queen street,cost $2,100; C. Muffitt, 2-storey brick store,1096 Bathurst street, cost $2,200; F. Tushingham, 2-storey and attic, stone and brick dwelling, 104 Pearson ave., cost $3,500; H. J. & E. R. Reynolds,two 2½-storey brick dwellings, Spadina road, cost $10,000; D. Todd, pair 2-storey brick dwellings,Shaw street, near Bloor, cost $5,000; J. Honden, 2-storey brick and stone dwelling, corner Perth and Ruskin avenues, cost $2,000; W. Pudifin, four 2-storey brick dwellings, Gladstone ave., near College street, cost $8,500; Love Bros., six 2-storey brick veneer stores and dwellings, corner Broadview and First avenues, cost $12,000; W. B. Charlton, pair 2½-storey brick dwellings, Macpherson ave., near Molson, cost $5,500; and two 2½-storey brick dwellings, College street, near Gladstone ave.,cost $6,000; F.B.Poucher, pair 2-storey brick dwellings, Sparkhall ave., cost $4,000; J. M. Bell, 2½-storey brick dwelling, Marion street west, cost $2,930; R. T. Robinson, 2-storey brick dwelling, Yarmouth road, cost $2,600; McCormick estate, 2½-storey stone and brick dwelling, Avenue road, near Cottingham street, cost $47,000.

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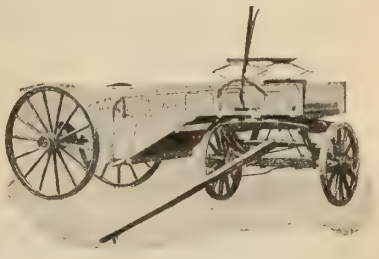

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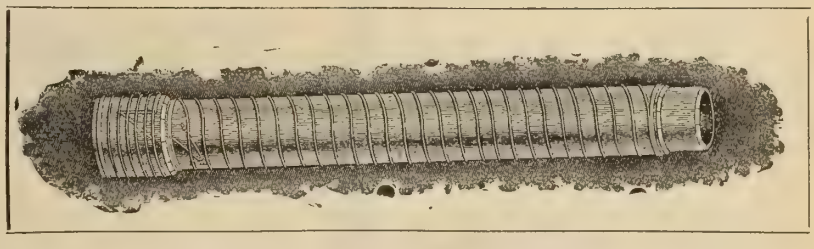

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Synagogue: E. Jacques, contractor, $3,480.

AMHERST, N.S.—Business block for the 2 Barkers Limited: Silliker & Co., contractors.

WALKERTON, ONT.—$6,900 Eastnor township debentures: J. C. Eckford, purchaser, $6,910.

MITCHELL, ONT. — Methodist parsonage building: John Avery, contractor, cost about $3,000.

PICTON, ONT.—Heating system of public school: Pease furnace Co., Toronto, contractors, $2,800.

ENGLEHART, ONT. — Roundhouse for T. & N. O. R.: Forest City Paving Co., London, contractors.

CARNDUFF, SASK. — Erection of school building: W.C. Stedham, Brandon, successful tenderer, $15,705.

LETHBRIDGE, ALTA.—Heating and ventilation in Westminster school: Hick & Wakley, contractors, $2,675.

WATERLOO, ONT.—Cooperage building for C. J. Mueller: Brick work, John Letter; carpenter work, Ovens & Jacobi.

ST. CATHARINES, ONT.—Construction of vitrified brick pavement on St. Paul street: Newman Bros., contractors.

BRAMPTON, ONT.—Construction of sidewalks: Royal Artificial Stone Paving Co., of Guelph, contractors, cost $9,000.

GRAND FORKS, B. C.—Roofing of Granby furnace building: Grand Forks Steel Structural Works, contractors, $10,000.

WOODSTOCK, ONT.—Two cottages at the Asylum for Epileptics: Fisher Co., Brantford, contractors, cost about $48,000.

REGINA, SASK. — Supply of "Northampton" Portland cement, 10,000 barrels: Stinson-Reeb Builders' Supply Co., Montreal.

CHARLOTTETOWN, P. E. I.—Building for Charlottetown Club, corner King and Great George streets: Lowe Bros., contractors.

NEW WESTMINSTER, B. C.—Erection of docks on Front street for the G. N. R.: Piling, G. A. Gilley; superstructure, H. M. Marshall.

KENORA, ONT. — "Northampton" Portland cement for the Kenora power plant: Stinson-Reeb Builders' Supply Co., Montreal.

PINKERTON, ONT.—Two steel bridges over Teeswater river in Township of Greenock: Hunter Bridge & Boiler Co., Kincardine, contractors, cost $2,975.

QUEBEC, QUE.—M. P. Davis, contractor, of Ottawa, has secured a subcontract for construction of the first fifty miles of the G. T. P. R. running west from Quebec bridge.

EAST TORONTO, ONT. — Masonic Temple building on Balsam avenue: Concrete work, A. Johnson, Norway; carpenter work, F. Armstrong; plastering, J. C. Jordon; painting, Mr. Stanley.—Snell's drug store on Queen street east: N. Stevenson, contractor, cost about $4,000.

MONTREAL, QUE.—14 h. p. direct current engine, 675 h. p. generator, motors, cars, etc., for the Montreal Street Railway: Canadian Westinghouse Co., contractors, cost $130,000. — C. P. R. station addition on Windsor street: Canadian White Co., contractors, cost about $60,000.

TORONTO, ONT.—The T. & N. O. R. have given the contract to the Canadian Locomotive Works, Kingston, for two switching engines. — The Board of Control have awarded the following pavement contracts: Asphalt, Bay street, from King to Queen, Godson Contracting Co., $6,482; Queen, from Yonge to River, Barber Asphalt Paving Co., $24,920. Granite block, City Engineer, Richmond street, from York to Victoria, $12,236; Victoria from Richmond to Queen, $1,494; Scott street, from Front to Wellington, $1,230; Wellington street, from Scott to Yonge, $2,145.

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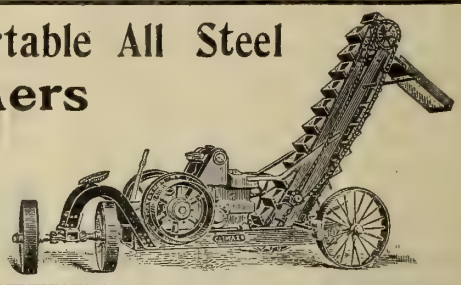

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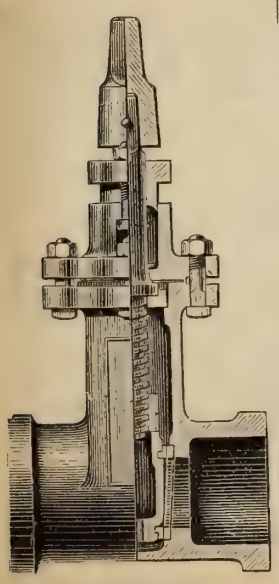

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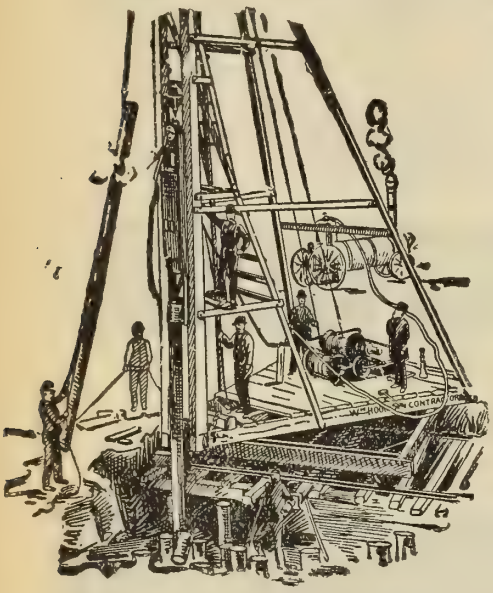

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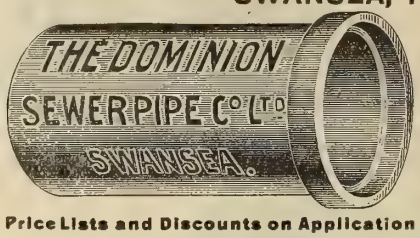

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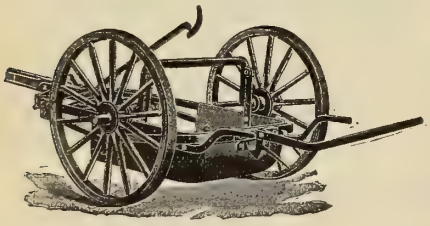

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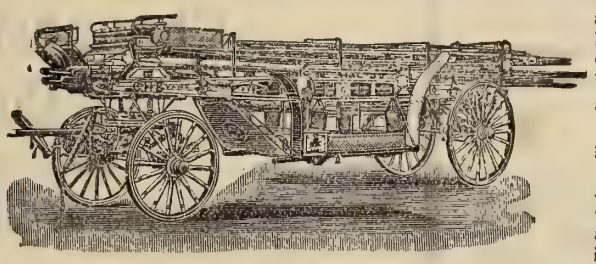

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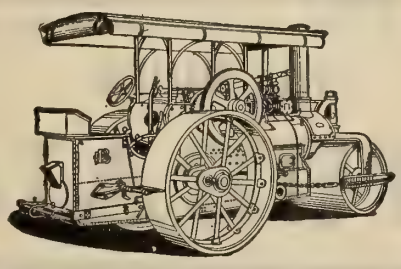

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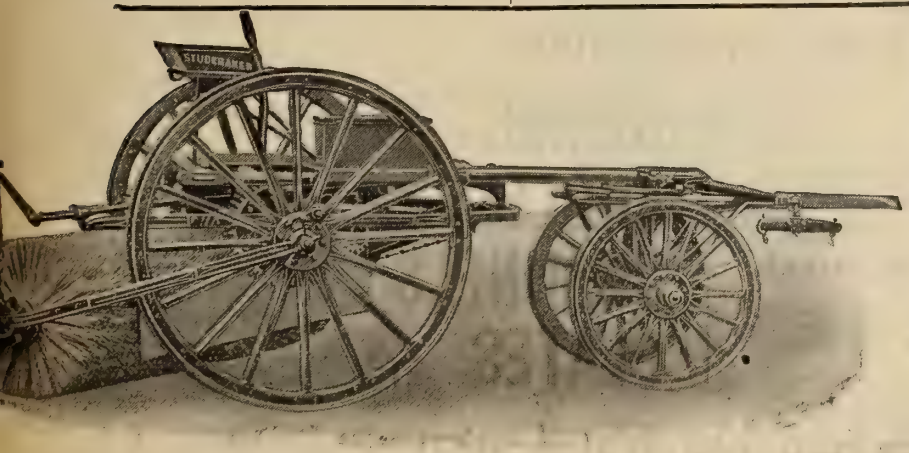

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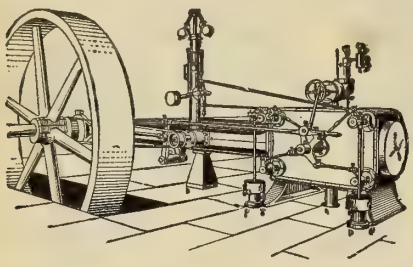

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" 1½ inch to 2	23.00	25.00
Basswood, Common and better, 1 to 1¼ inch	23.00	24.00
Basswood, 1½ to 2 inch	24.00	26.00
Elm, soft, mill run, 1 to 1½ in.	23.00	24.00
Elm, rock, mill run, 1 to 1¼ in.	23.00	25.00
Maple, common and better, 1 to 1½ inch	22.00	23.00
Oak red plain, 1sts and 2nds, 2 to 4 inch	44.00	46.00
Oak, white, 1sts and 2nds, 1 to 1½ inch	42.00	44.00
Oak, quartered, 1sts and 2nds	70.00	80.00

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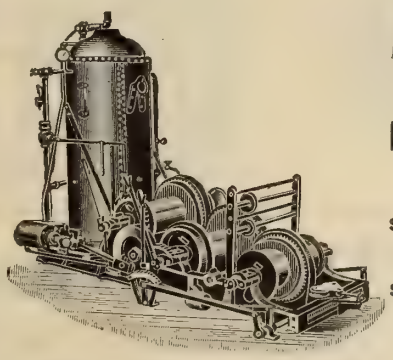

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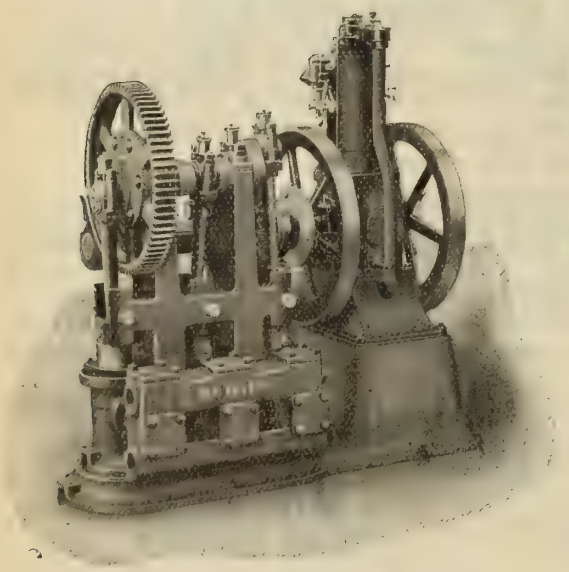

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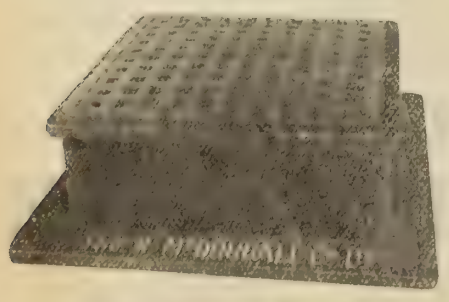

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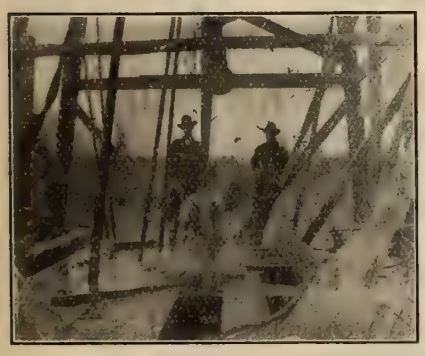

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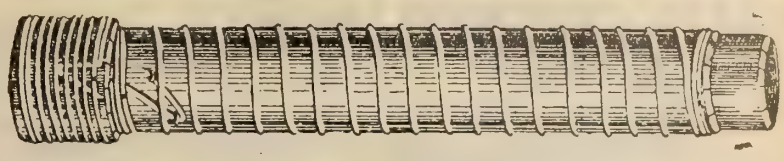

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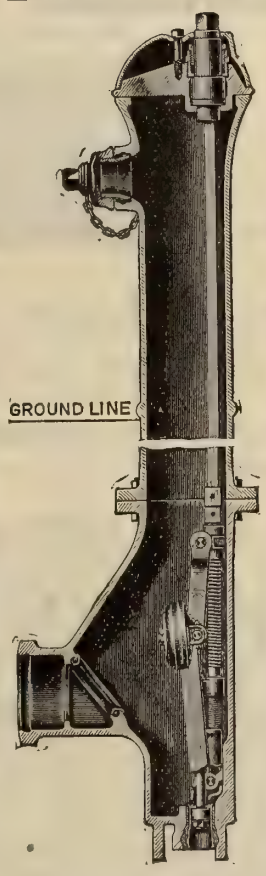

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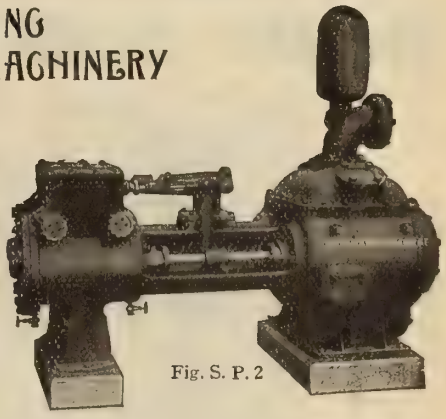

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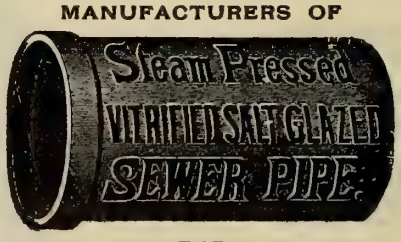

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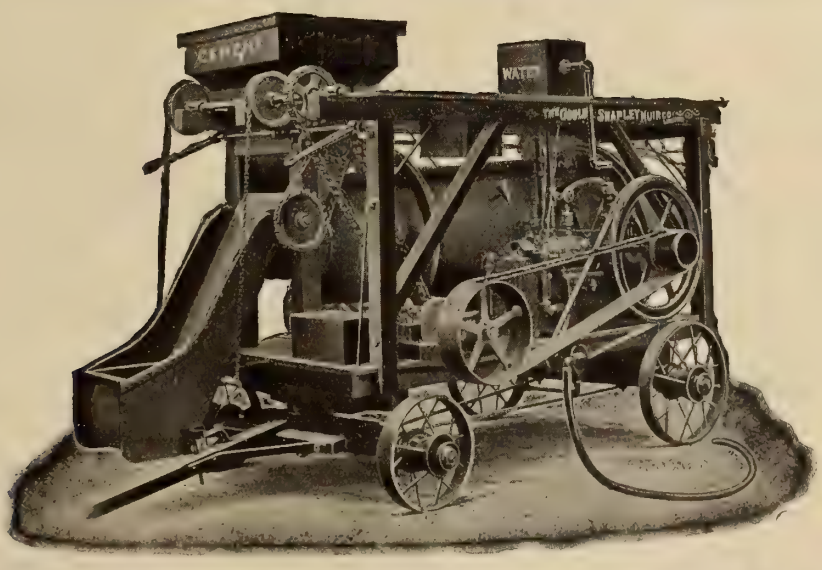

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Concrete turned out is unexcelled
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Machine is fully
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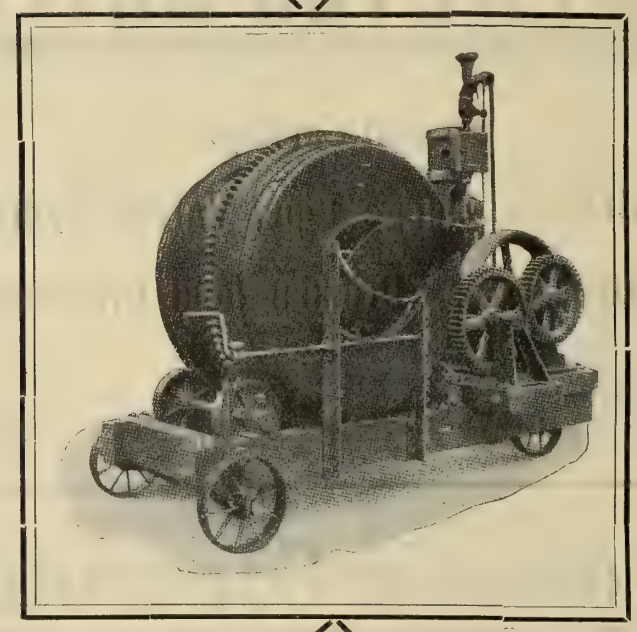

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CANADIAN

Contract Record

A Weekly Journal of Public Works, Tenders, Advance Information and Municipal Progress

This Paper Reaches Every Week the Town and City Clerks, Town and City Engineers, County Clerks and County Engineers, Purchasers of Municipal Debentures and Leading Contractors In All Lines Throughout Canada

VOL. 17. TORONTO, MONTREAL — JUNE 6, 1906 — WINNIPEG, VANCOUVER No. 14

THE CANADIAN CONTRACT RECORD
PUBLISHED EVERY WEDNESDAY
As an intermediate Edition of the Canadian Architect and Builder.

THE C. H. MORTIMER PUBLISHING COMPANY
of Toronto, Limited.

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ANYBODY can say they have got the best road, but that don't make it so. WHAT REASON is there for the present DEPLORABLE SITUATION in paving affairs?

IF YOU WANT TO KNOW, ask

The Nash Road, Borough of Brooklyn, N. Y. City, U.S.A.

To Contractors

Tenders will be received at the office of the undersigned for the work of all the trades required in the erection of

THE AVENUE ROAD PRESBYTERIAN CHURCH,

until noon on SATURDAY, JUNE 9th. Lowest or any tender not necessarily accepted.

SYMONS & RAE, Architects,
15 Toronto Street, Toronto.

CITY OF REGINA

TENDERS FOR

ELECTRIC LIGHT MACHINERY

The Corporation of the City of Regina will receive tenders until JULY 2ND, 1906, for the supply of a 100 k. w., 3 phase, 2200 volt, 300 r.p.m., revolving field generator, direct connected to a 150 h.p. automatic cut-off engine, with direct connected exciter, one generator panel and one feeder panel, with instruments and controlling switches, etc. Specifications may be obtained by applying to the City Clerk, City of Regina.

J. KELSO HUNTER,
City Clerk.

Regina, 22nd May, 1906.

Tenders Wanted

Whole and separate tenders will be received by the undersigned up to JUNE THE 15TH, 1906, for the building of a High School in the Town of Penetanguishene. Plans and specifications can be seen at the offices of the architect, Thomas Kennedy, Barrie, and at the office of Dr. McDonald, Penetanguishene.

REV. J. T. KIDD,
Secretary High School Board.

Penetanguishene, May 30, 1906.

Tenders Wanted

Sealed tenders will be received by the undersigned, up to JUNE THE 9TH, 1906, for the Seating and Leaded Glass Windows required in the Eastern Methodist Church, Napanee, Ont.

Plans, specifications and further particulars will be furnished on application to the undersigned.

The lowest or any tender not necessarily accepted.

W. F. HALL,
Secretary of Building Committee.

Napanee, Ont., May 11th, 1906.

CITY OF REGINA

Tenders for Fire Hose

Sealed tenders, marked "Tenders for Hose," will be received by the undersigned up to MONDAY, 18TH JUNE, 1906, at 5 o'clock p.m., for 1000 feet of cotton covered gum and wax hose for fire protection purposes.

The lowest or any tender not necessarily accepted.

J. KELSO HUNTER,
City Clerk.

Regina, May 29th, 1906.

Notice to Contractors

Sealed tenders endorsed "Tenders for South Branch Drainage Scheme," and addressed to John Mullin, Esq., Township Clerk, Cornwall Centre, Ontario, will be received up to 10 o'clock in the forenoon of the

18th DAY OF JUNE, A.D., 1906

for the construction of the South Branch Drainage Scheme, in the Townships of Cornwall and Charlottenburg.

The estimated quantities are as follows:
87479 cubic yards earth excavation.
2167 " hard pan and loose rock.
480 " rock.

The contractors are requested to send in tenders for the whole work in both Townships.

Plans and specifications may be seen at the office of John Mullin, Township Clerk, Cornwall Centre, and W. H. Magwood, Esq., Civil Engineer for the Township of Cornwall, Cornwall, Ont., on and after this date.

An accepted cheque for 10 per cent. of the amount of the tender for the work must accompany the same.

The lowest or any tender not necessarily accepted.

Dated at Cornwall this 18th day of May, A.D. 1906.

W. G. BENNETT, Reeve
JOHN MULLIN, Tp. Clerk.

By HARKNESS & MILLIGAN, Solicitors.

City Engineer

Applications will be received by the undersigned up to THURSDAY, JUNE 14TH, for the position of City Engineer of the City of Kingston, Ont. Applicants are requested to state experience and salary expected.

L. W. SHANNON,
City Clerk.

Department of Railways and Canals
Canada

ST. LAWRENCE CANALS
MURRAY CANAL
NOTICE TO CONTRACTORS

Sealed tenders addressed to the undersigned and endorsed "Tender for Concrete Superstructures," will be received at this office up to 16 o'clock on FRIDAY, THE 15TH DAY OF JUNE, 1906, for the construction of Concrete Superstructures for the wooden piers at the entrance to the Murray Canal, and, Reinforced Concrete Bridges to span the openings between piers.

Plans and specifications of the work can be seen on and after Monday, the 21st of May, 1906, at the office of the Chief Engineer of the Department of Railways and Canals, Ottawa, and at the office of the Superintendent of Operation, Cornwall, Ont., at which places forms of tender may be obtained.

The Department does not bind itself to accept the lowest or any tender.

By order,
L. K. JONES,
Secretary.

Department of Railways and Canals,
Ottawa, 17th May, 1906.

TENDERS FOR

Drainage Works

The corporation of the Township of Cavan will receive sealed tenders marked "Tenders for Drainage Works," and addressed to John J. Fair, Millbrook P. O., up to noon of WEDNESDAY, 27TH DAY OF JUNE, 1906, for the construction of Drainage Works a distance of about seven miles through the Townships of Cavan and North Monaghan, according to plans and specifications made by John E. Belcher, Engineer, which may be seen at the office of John J. Fair, Township Clerk, Millbrook.

Each tender must be accompanied by an accepted cheque drawn upon any chartered bank in Canada, payable to the order of "The Treasurer of the Township of Cavan," for the sum of $500, or in lieu thereof a cash deposit of said amount, which will be subject to forfeiture in the event of failure on the part of the Contractor to enter into a satisfactory written contract when notified to do so.

The contractor whose tender is accepted will be required to furnish a bond of $2,000 satisfactory to the Township Council, and the Contractor will also be required to enter into a special covenant not to unnecessarily interfere with or endanger public traffic on the township highways during the construction of the works.

The Township Council reserve the right to reject any or all tenders or to accept any bid which may appear advantageous to the Township of Cavan.

JOHN J. FAIR, Township Clerk,
Milbrook, Ont.

Dated at Millbrook this 28th May, 1906.

[FOR ADDITIONAL ADVERTISEMENTS FOR TENDERS SEE NEXT PAGE.]

NOTICE TO CONTRACTORS

TENDERS

Sealed tenders will be received until 6 o'clock p.m., on WEDNESDAY, THE 20TH DAY OF JUNE, A. D. 1906, for the erection of a Public Library building in the town of Perth. Tenders to be addressed to J. A. Kerr, Secretary Perth Public Library Board, Perth, Ont.

The lowest or any other tender not necessarily accepted. For plans and specifications and all other information apply to

G. T. MARTIN, Architect,
Perth, Ont.

Tenders for Walks

Sealed tenders will be received by the undersigned, up to noon, WEDNESDAY, JUNE 14TH, 1906, for the construction of Cement Walks required in the Town of Collingwood for the year 1906.

Tenders to state price per square foot for sidewalks and price per square foot for curbing.

Plans and specifications may be seen at the office of the Town Clerk during office hours

The lowest or any tender not necessarily accepted.

W. A TOM,
Chairman Board of Works.

SEALED TENDERS

will be received by Charles E. Grant, the Town Clerk, at his office, Town Hall. Orillia, Ont., until 12 O'clock noon, MONDAY, JUNE 11TH, 1906, for the construction of a

CONCRETE DAM

at Ragged Rapids on Severn R'ver near Orillia, Ontario.

Plans and specifications may be seen on and after Monday, May 28th, in the office of the Town Clerk, Orillia, Ont., and the office of the Engineers, McDougall & McRae, Room 55 Citizen Building, Ottawa, Ont.

Lowest or any tender not necessarily accepted.

Papers printing this notice without proper authority shall not be paid.

NOTICE TO CONTRACTORS

The town of Amherst, Nova Scotia, invites bids for the construction of about Sixteen Thousand Square Yards of permanent Street Pavement and Sidewalks, with curb and and gutter and required grading.

Contractors are asked to furnish full particulars and complete specifications as to pavement and sidewalk they are prepared to construct. Wood blocks or brick will not be considered.

Bids will be received up to MONDAY, JUNE 15TH, 1906, at 5 o'clock p. m.

Further particulars on application to the undersigned. The Council does not bind itself to accept any tender.

W. F DONKIN,
Town Clerk.

Amherst, N. S., May 26th, 1906.

TENDERS

Specifications, covering the eqnipment required for enlarging the Electric Light Plant of the Corporation of Barrie, Ont, consisting approximately of water tube boilers, direct connected engine and generator of four hundred and fifty horse power capacity, switchboards, piping, condensers, heaters, pumps, economizers, etc., etc., and a series alternating street lighting system, are now ready and may be seen at the office of the undersigned. Sealed tenders covering boiler, engine and generator only must be delivered to the undersigned by JUNE 18TH.

The lowest or any tender not necessarily accepted.

K. L. AITKEN,
164 Bay St., Toronto. Consulting Engineer.

The Stanstead granite quarries are running full blast again since the recent strike.

The firm of Leduc & Co., tinsmiths and roofers, Ottawa, Ont., has removed to Montreal.

Darling Bros., Montreal, have have been granted a license to do business in Ontario. Richard Dawson, Toronto, is their attorney.

Paving Tenders

Tenders for the following pavements will be received up to 5 o'clock on THURSDAY, JUNE 21ST.

Vitrified brick pavement on Talbot Street.
Vitrified brick pavement on Market Lane.
Vitrified brick pavement on York Street.
Macadam pavement with Kentucky Rock Asphalt on King street.

Lowest or any tender not necessarily accepted.

Plans; specifications and form of tender at this office.

A. O. GRAYDON,
City Engineer,
ALD. WM. GERRY, London. Ont.
Chairman No. 2 Committee.

CONTRACTS OPEN.

CRANBROOK. B. C. — The Fink Mercantile Co. will build a business block, cost $20,000.

HULL, QUE. — The citizens are considering the establishment of a hospital here.

CAMPBELL'S BAY, QUE. — T. McManus will erect a residence here this summer.

HUNTLEY, ONT.—Mrs. L.E. Bradley and T. Downey are preparing to erect residences here.

LACOMBE, ALTA.—The by-law has been carried to raise $30,000 for erecting new school building.

SHERBROOKE, QUE.—A new R. C. hospital is to be erected on Bridge street, cost $100,000.

WESTON, ONT.—Plans have been prepared for branch building for Bank of British North America.

DAUPHIN, MAN.—Shaw Bros propose building a furniture building in addition to their mill.

AYLMER, QUE.—Thackray & Bailey are considering the erection of a saw mill and factory near here.

KINGSVILLE, ONT.—D. Conklin is preparing to build a residence, corner Main and Division streets.

SWANSEA, ONT.—The Toronto Bolt Works will soon begin the building of their works recently burnt.

GODERICH, ONT. — The Town Council have decided to construct cement sidewalks to cost about $7,000.

LETELLIER, MAN.—Mr. Senecal, architect, St. Boniface, is preparing plans for a residence for W. Fraser.

BOULEVARD ST. PAUL, QUE.—N. Jodin has taken tenders for extension of the acqueduct of the village.

KENORA, ONT.—J. W. Short has purchased the site of the reduction works and will erect a railway tie mill.

FERGUS, ONT.—The William Ryan Company purpose making extensive additions to their building here.

WOODSTOCK, N.B.—E. K. Connell has taken tenders for erection of a wing to the Broadway school building.

SHOAL LAKE, MAN.—The erection of a new grist mill at an early date is being considered by the citizens.

HARTNEY, MAN.—T. B. Woodhull will receive tenders up to July 2nd for the purchase of $5,000 town debentures.

ST. CATHARINES, ONT. — Plans are being prepared for the new Anglican church building in east end of city.

ST. BONIFACE, MAN.—The Council intend laying creosoted block pavement for which tenders will be invited

COBOURG, ONT.—A Governmen engineer has been making soundings in the harbor for improvements to be made.

WATERLOO, ONT. — The Town Council have asked W. M. Davis, C.E., of Berlin, to report on the sewage system of the town with regard to improvements.

GRANBY, QUE.—S. Page has purchased a lot on Main street on which he intends erecting a three-storey brick hotel.

MILVERTON, ONT.—W. D. Weir will receive tenders up to June 15th for construction of cement sidewalks in this village.

CALGARY, ALTA.—The Bell Telephone Co. have secured a site on Seventh avenue for a central exchange building.

BARRIE, ONT.—Plans have been prepared for a three-storey building for the Y.M.C.A. on Bradford street, cost $8,000.

ROSTHERN, SASK.—F. R Wright has purchased a site opposite C. P. R. station for three-storey brick hotel building.

TORONTO JUNCTION, ONT.—The Bank of British North America have had plans prepared for enlarging their building.

ST. THOMAS, ONT. — The City Council have decided to issue $30,000 debentures for extension of their gas mains, etc.

SIMCOE, ONT.—J. T. Murphy will receive tenders up to June 8th for construction of granolithic sidewalk on Agricultural street.

VICTORIA, B.C.—It is understood that the Quatsino Power & Pulp Co. will erect a large pulp mill on Quatsino-Sound, cost $200,000.

ST. JOHN, N.B. — Waterbury & Rising have leased building on Prince William street which they will have remodelled for their use.

BELLWOOD, ONT. — H. McDonald will receive tenders up to June 13th for construction of a bridge with cement abutments in the village.

WALKERTON, ONT. — Canada Furniture Manufacturers will receive tenders up to June 7th for the improvement of their new factory.

SEAFORTH, ONT.—On June 11th the by-law will be voted on to loan $10,000 to the Willis Shoe Company to establish a factory here.

YORKTON, SASK. — Darling & Pearson, architects, Winnipeg, have taken tenders for a branch building for the Union Bank of Canada.

BROCKVILLE, ONT.—B. Dillon, architect, will receive tenders up to June 16th for erection of chancel to St. Paul's church, also for alterations.

RENFREW, ONT.—The Renfrew Rolling Mills Co. will receive tenders up to June 8th for erection of a store house joining their present building.

EAST TORONTO, ONT. — Breckels & Matthews, organ builders, have asked the Council as to inducements to them locating a factory here.

ATWOOD, ONT. — T. G. Ratcliffe, Township Clerk, will receive tenders up to June 14th for construction of the Posliff drain in the township of Elma.

HUME, B. C.—Tenders have been taken by the Deputy Commissioner of Lands & Works for erection of a school building at Ymir electoral district.

FORT WILLIAM, ONT. — The C.P.R. have purchased a site for the new station building.—The work of rebuilding the Ogilvie elevator will soon begin.

CHATHAM, N.B. — Lea & Coffin have reported on the remodelling of the electric light plant, cost $20,650, and tenders will soon be called for the work.

TAVISTOCK, ONT. — V. Stock, Township Clerk, will receive tenders up to June 15th for construction of two

Second-Hand Plant

IMMEDIATE SALE

1 250 yard continuous concrete mixer.
1 125 yard cube concrete mixer.
1 18 Horse Power Waterous Traction Engine.
1 No. 2 Beatty Double Drum Horse Power.
1 500 ft. Cableway with hoist and Clam Shell Bucket.
1 Deane Condenser.
1 Gordon duplex steam pump.
1 Knowles duplex steam pump.
1 12 x 15 Snyder horizontal engine.
1 6 Horse Power Marine engine.
1 3 Horse Power vertical engine.
2 100 Horse Power upright boilers.
1 Locomotive boiler 7 ft. x 19 ft. 10 in.
1 Small upright boiler.
2 1 yard Bottom dumping concrete buckets.
1 1½ yard Orange peel buckets.
2 70 ton Norton Jacks.
1 Planing machine for 12" x 30" timbers.
1 Circular saw mill.
1 40 ton locomotive with tender.
1 45 ton locomotive with tender.
1 45 ton Vulcan Steam Shovel.
4 28 ton std. gauge locomotives with tenders.
13 Dump cars 29 ft. o. a.
14 Dump cars 33 ft. o. a.
1 Tank Car 33 ft. long.
1 Pile Driver with 2400 lb. and 1800 lb. hammers.
1 5 ton Clutch hoist and boiler.
2 Single drum horse powers.
8 1½ yard horse dump cars.
1 10 horse power shop engine.
1 Williams drilling machine.
1 Shaping machine.
1 Lathe 17" swing.
1 Emery wheel and table.
2 10 ton hydraulic jacks.
2 20 ton hydraulic jacks.
2 10 ton ratchet jacks.
1 6 x 4 x 6 Worthington pump.
4 8¼ x 10 D. C., S. D., Bacon hoists.
1 75 H. P. vertical boiler.
2 1 yard self righting concrete buckets.
1 2 ton air hoist.
1 3 ton air hoist.
1 16½ x 24 standard gauge locomotive.
1 No. 3 Warrington steam pile driver.
6 No. 3 wheel scrapers.
1 1½ yard Beatty Steam Shovel with flat car.
1 50 H. P. motor.
1 20 H. P. motor.
1 3½" x 6" "Mac" Rock Drill.
1 1½ yard clam shell bucket.
1 Gasoline motor car.
1 Rock Crushing plant.
1 ½ yard Stuebner bucket.
1 8¼ x 10 quick hoisting engine.
4 1 yard Stuebner concrete buckets.
4 Platform cars 8' x 4' 6".
1 6" centrifugal pump.
2 Hand Cars.
1 55 ton Marion Steam Shovel with Bucyrus Engines.
1 No. 0 Smith Mixer on skids.
1 8 ton guy derrick.
1 10" centrifugal pump.
1 Drake continuous concrete mixer.
1 5 x 8 D. C. D. D. Hoist.
18 4 yd., two way dump cars.
24 1 yd., two way dump cars.
30 No. 3 wheel scrapers.
80 No. 1 drag scrapers.
2 "Mac" D. W. Drills.
1 6 x 12 D. C. D. D. Beatty Hoist.
1 Ballast plow.
1 ¾ yd. Calhoun excavating shovel.
3 2 yd. wooden cableway buckets.
1 7 x 12 D. C. D. D. Hoist.
1 Railway Pile Driver.
1 K & G 1 yd. cube concrete mixer.
2 row boats.
2 standard gauge lorries.
1 Fairbanks and Morse hand car.
1 Blasting Battery.
4 sets wheels and axles.
1 50' elevator.
1 12 x 12 stationary engine.
1 Sullivan "E" Diamond Drill.
1 set derrick irons.
1 centrifugal pump 10" suction 8" discharge.
1 stone bin for rock crusher.
1 3½ ft. Carlin cube mixer.
1 No. 2 Marion ditcher.
1 Blake Rock Crusher 12" x 20" jaws.
1 Revolving screen for above.
1 belt conveyor for above.
1 26 x 26 x 30 dimension planer.
1 25' champion elevator.
1 Single drum hoist.
1 500' cableway complete.
2 travelling derricks with aerial dump attachment.
1 25 horse power vertical engine with boiler.
1 7½ x 6 x 10 Northey duplex pump.
1 8" centrifugal pump.
1 6" centrifugal pump.
2 steam drills 3¼" cylinders.
1 13 horse power portable engine and boiler.
1 15 horse power portable engine and boiler.
1 30 horse power portable engine and boiler.
1 Boring machine.
1 No. 3 Smith concrete mixer on skids.
1 set guy derrick irons.
1 lot 8½ cu. ft. dumping buckets.
1 lot 12½ cu. ft. dumping buckets.
1 lot 2 yd. scale boxes.
1 lot 1½ cu. yd. dump cars.
1 hod elevator.
1 2 stamp mill (new)
1 10 x 15 engine.
1 horizontal boiler 3' 6" x 11'.
1 30' flat car.
1 35' flat car.
1 24' elevator.

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drains in the township of South Easthope.

CORNWALL, ONT.—On June 30th a by-law will be voted on to grant $20,000 to the Modern Bedstead Co., of Sherbrooke, Que., to build a factory here.

BRUSSELS, ONT.—W. E. Binning, architect, Listowel, is preparing plans for Agricultural hall for the East Huron Agricultural Society, cost about $3,000.

BIRCH HILLS, SASK.—D. F. Lowe will receive tenders up to June 15th for erection of school building in the Tiger Hill S.D. No. 1516. Plans with J Clarke.

KEEWATIN, ONT. — The Backus Brooks Company, who have purchased the limits of the Keewatin Lumber Company, purpose erecting a large saw mill on their property.

CORNWALL CENTRE, ONT.—J. Mullen, township clerk, will receive tenders up to June 9th for construction of the Lorneville sewer extension in the township of Cornwall.

FERNIE, B.C.—The Roman Catholic congregation intend erecting a new residence for the priest of this parish.—Tenders have been taken for the erection of the new C.P.R. station here.

DUNCAN, B.C.—Tenders will be received up to June 11th for erection of a bridge across the Cowichan river. Plans at the offices of the Public Works Engineer and Government Agent.

PENETANGUISHENE, ONT. — Rev. J. T. Kidd will receive tenders up to June 15th for erection of High school building. Plans with T. Kennedy, architect, Barrie, and Dr. McDonald.

NEW WESTMINSTER, B.C.—It is expected that the G.N.W. will erect a grain elevator here.—It is reported that a mill site at Bon Accord has been sold to American millmen for a new building.

INEVRNESS, N. S.—F. Gelinas, Department of Public Works, Ottawa, Ont. will receive tenders up to June 16th for construction of Post office. Pans at above named office and with Postmaster here.

GUELPH, ONT.—Tenders will be received at Department of Public Works, Toronto, up to June 12th for erection of an addition to the Chemical building and alteration of greenhouses of Agricultural College.

HALIFAX, N.S. — The Improved Dwellings Co. are offering a prize to architects for plans for block of tenements which they propose to build. Information obtained from R. H. Brown, 36 Kent street.

OWEN SOUND, ONT.—Superintendent Linden, of the Electric Light Department, is asking for tenders up to the 11th inst. for equipments for the plant. Plans for additional buildings are being prepared.

SASKATOON, SASK.—W. P. Bate, Box 7, will receive plans from architects for four-roomed brick school building, cost about $10,000.—The school trustees will soon offer for sale $30,000 six per cent. debentures.

PETERBORO, ONT.—K. E. Wilmot has taken tenders for the erection of a new vestry building for St. John's church.—George street Methodist church are considering the erection of a new building, cost about $10,000.

AMHERST, N.S. — Tenders will be received by W. F. Donkin, Town Clerk, up to June 15th for construction of street pavement and sidewalks.—The Hewson Woollen Mills Co. purpose making a large addition to their factory.

QUEBEC, QUE.—The C.P.R. have purchased the Lagenvin estate, Descarrieres street, for the proposed enlargement of the Chateau Frontenac.— The plans of Staveley & Staveley, architects, for the Central school building have been accepted by the Protestant School Commissioners.

BRANTFORD, ONT.—Ham & Nott intend enlarging their warehouse and factory, cost $4,000.—J. T. Ham will receive tenders up to June 7th for erection of additions to Huron street school building. Plans with Stewart, Witton & Taylor, architects.

MONCTON, N. B.—C.H. LaBallois, Department of Public Works, Fredericton, will receive tenders up to June 11th for building masonry, substructure and approaches of Hall's creek bridge. Plans at above named office and with Hon. C. W. Robinson, M.P.P.

LETHBRIDGE, ALTA.—O.W. Kerr purposes erecting a hotel building at Warner.—The city is offering a free site and tax exemption for flour mill proposed to be built here.—Plans are being prepared for new warehouse of the Jobbing Company, cost $40,000.

BRANDON, MAN. — The Council have decided to pave the overhead traffic bridge at Ninth avenue with creosote blocks—W. H. Shillinglaw, City Engineer, will receive tenders up to June 18th for labor in laying water mains.—J. H. Hughes will build a business block here, cost $40,000.

REGINA, SASK.—J. W. Smith will receive tenders up to June 6th for erection of a stone and brick church for the Methodist congregation. Darling & Pearson, Winnipeg, architects.—A.&.W. Melville, architects, Winnipeg, have prepared plans for the new fire hall here, cost about $20,000.

MEDICINE HAT, ALTA.—A by-law will be voted on June 15th to raise $120,000 for extension to gasworks and waterworks mains, installation of filtration system, etc.—The Doty Biscuit Co. is being formed and have asked the town for a free site for a factory and other privileges.

ST. MARY'S ONT.—The by-law has been carried to raise $3,000 for constucting granolithic sidewalks and $7,000 for permanent roads and culverts. — F. Gelinas, Department of Public Works, Ottawa, will receive tenders up to June 22nd for construction of post office building. Plans at above office and with the Postmaster here.

HAMILTON, ONT.— S. H. Kent, City Clerk, will receive tenders up to June 21st. for $35,000 school debentures, $60,000 waterworks debentures and $83,443 local improvement debentures. Interest at 4 per cent.—The trustees of Trolley street public school have decided to enlarge their building, cost $2,000.—S. McPhie intends building a residence corner of Homewood avenue and Kent street.

EDMONTON, ALTA. — The new church building for the Roman Catholic Mission on Kinistino avenue will soon begin, cost $8,000.—The plans for the new Legislative building have been prepared, cost over $600,000.—J. Valette has sold the property corner Jasper and Fourth streets, on which it is expected a hotel will be erected.—W. Ramsay has had plans prepared for a greenhouse to be built on Eleventh street, cost $11,000.

STRATHCONA, ALTA.—The Presbyterian congregation are having plans prepared for a new church building, corner Main street and Lumsden avenue.—Holy Trinity church are considering the erection of a new building on the site of their present premises.—St. Anthony's Roman Catholic church intend making improvements in their building.—The trustees of the R. C. separate school are considering the erection of a four-roomed school building.

LONDON, ONT.—J. W. Little will receive tenders up to June 6th for repairs and additions to the Exhibition buildings, Queen's Park.—It is expected that the work of remodelling the Vaudeville theatre will soon begin.—The Board of Works have recommended bitulithic pavement on Park avenue between Dundas street and Queens avenue.—Some local capitalists have secured options on site for a new proposed amusement hall building.

OTTAWA, ONT. — The following building permits have been issued: Stewarton Presbyterian church, 1 stone church, Bank street east, $28,000; Davis & Hill, brick dwelling, Eighth ave., cost $3,200; E. P. & W. E. Dry, brick dwellings, Florence street, $12,500; Canada Oil Co., a concrete warehouse, Wellington street, $5,000; Charles Ogilvy, solid brick store, Rideau street, $40,000; W. H. McAuliffe, brick dwelling, double house, Lisgar street, $11,000; Mrs. S. A. Abbott, solid brick double house, Fourth ave., $4,500; Isaac Cowie, brick veneer double house, Second ave., $3,000.

STRATFORD, ONT.—J. J. Hagarty, proprietor of the Commercial Hotel, is having plans prepared for extensive alterations in that building.—The following building permits have been issued: G. F. Gillihand, brick veneer residence, Well street; S. L. Ireland, brick residence, Nelson street; George Litt, brick residence, Front street; Dr. Daisy Macklin, brick residence, Ontario street; F. B. Vanstone, brick residence, Cobourg street; W. J. Mooney, brick veneer residence, Avon street; The Stratford Curling Co., Limited, a frame curling rink, Water street.

VANCOUVER, B.C. — The Gillies Hotel Syndicate are considering the erection of a hotel, corner Hasting and Abbott streets.—The Waterworks Committee will receive tenders up to July 8th for supply of cast iron and steel pipe for waterworks extensions.—Grant & Henderson, architects, have taken tenders for the erection of a four-storey hotel, corner Georgia and Burrard streets, for B. T. Rogers.—Parr & Fee, architects, are preparing plans for a three-storey business block on Cordova street for J. Chamberlain.—The same architects have prepared plans for a four-storey structure to replace the present Sunnyside Hotel.

MONTREAL, QUE.—The Finance Committee have voted $100,000 for permanent sidewalks.—A report will soon be made to the Council for increasing the city's water supply by enlarging the aqueduct from Lachine to St. Gabriels ward.—J. R. Beatty will receive tenders up to June 8th for sewer pipe, Y branches, drain tile, iron water pipe and special castings, hard burnt bricks, manhole frames and covers for the town of St. Lambert.—The report of the Road Committee to spend $14,500 for paving between car tracks on St. James street, was adopted.—A syndicate of English capitalists have a scheme for construction of a bridge between this city and Longueuil, estimated cost $11,000,000.—The R. C. School Board have decided to purchase a site near Hay Market Square for two schools for the parish of St. Helen.—The following building permits have been issued:—F. Ship, four brick dwellings, Bishop street, $12,000; A. S. Lavallel, one brick dwelling, St. Elizabeth street, $5,000; Paroissi De La Nativite De Hocheloga, one brick and stone dwelling, Dersey street, $18,900; Montreal Street Railway Co., stone factories, Glen avenue and Court street, $14,000; Antonie Gauthier, brick and wood dwelling, Joliette street, $5,000; Linton Apartment Co., one stone apartment house, Simpson and Sherbrook streets, $440,000.

WINNIPEG, MAN.—The W.C.T.U.

propose forming a joint-stock company to build a temperance hotel in the city.—The Fire, Water & Light Committee have taken tenders for the erection of a fire station in Ward 7.—A site has been secured on Logan avenue for the Men's Own building, and subscriptions are being solicited.—G. G. Teeter, architect, has taken tenders for the erection of a brick residence on Florence avenue for M. J. Dalton.—Tenders will soon be called for erection of five-storey hotel building, corner King and Logan streets, cost about $120,000. V. Barton, architect. —Blair & Northwood, architects, have prepared plans for a residence in Stradbrook place for S. E. Richards, cost $10,000.—H. B. Rugh, architect, has prepared plans for residence on Sherbrooke street for Dr. Denny, cost $4,500. —A. & W. Melville, architects, are preparing plans for residence in Stradbrook place for F. C. Patterson, cost $10,000. —J. Chisholm, architect, is taking tenders for residence at Armstrong's Point for A. Jardine.—The Works Committee will receive tenders this week for construction of granolithic walks on Alloway street, Jarvis, Cumberland, Notre Dame, McDermot, Bannatyne and Assiniboine avenues, for sewer construction in Pacific, Elgin, Alexander, Alloway and Wardlaw avenues and Blake streets, also for macadam and cedar block pavements.—The Architectural & Engineering Company have taken tenders for a residence on Simcoe street for C. Parker.—F. B. Evans, architect, will receive tenders up to June 9th for erection of a residence on Spence street for Mrs. S. Campbell.—J. D. Atchison, architect, has taken tenders for addition to the building of the Modern Laundry & Dye Works Co.

TORONTO, ONT.—C. E. Ryerson, Secretary Toronto Public Library, will receive tenders up to June 12th for erection of a branch library on Yorkville avenue.—A site has been secured on Broadway avenue, near Mount Hope cemetery, for new R.C. church building under direction of Basilica Order, cost about $28,000.—Tenders will be received at 48 Wright avenue for erection of store and dwelling. — A. B. Strachan, architect, has taken tenders for erection of a dwelling house.—Tenders will be received at 76 Montrose avenue for three houses.—Symons & Rae, architects, will receive tenders up to June 9th for the erection of the Avenue road Presbyterian church.—Tenders have been taken at 104 Wickson avenue for erection of a pair of houses.—Rev. Dr. Briggs, of the Methodist Book Room, is planning for an addition to their building.—The following asphalt pavements have been recommended: On Mutual street, from Gould to Gerrard, cost $3,905; Adelaide street, from Spadina to Bathurst, $18,418; Bloor street, from Yonge to Avenue road, $12,996.—The following building permits have been issued: J. J. Graham, 2-storey and attic stone and brick dwelling, Churchill ave., cost $5,500; Peter Hastings, 3-storey

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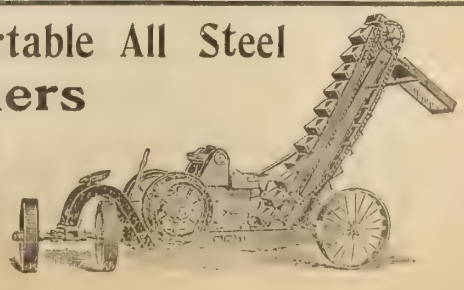

brick and stone store and dwelling, College street, near St. Clarens ave., cost $3,000; E. G. Switzer, 2-storey brick dwelling, Beatrice street, cost $4,000; C. Reaves, 2-storey brick and stone addition to dwelling, corner Huron and Wilcox streets, cost $6,000; Mary M. Herod, 2-storey and attic brick dwelling, Beatty ave., cost $3,200; G. C. Burnett, 2-storey brick dwelling, Edmund street, cost $11,000; J. Pierce, pair 2-storey and attic brick dwellings, Havelock street, cost $6,000; Mrs. Alice Gibson, 2-storey brick dwelling, Dovercourt road, near Bloor street, cost $3,000; Fred S. Duff, pair 2-storey and attic stone and brick dwellings, 111-113 Beatrice street, cost $5,500; F. C. Burroughs, 5-storey brick and stone store, Queen street, near Bathurst, cost $35,000; Thos. Barton, 2-storey and attic stone and brick dwelling, Ossington ave., near Bloor street, cost $2,800; Fred S. Duff, pair 2-storey and attic stone and brick dwellings, Beatrice street, cost $5,500; E. P. Atkinson, pair 2-storey brick dwellings, 90-92 Crawford street, cost $4,000; Geo. H. Hees, 1-storey brick office and warehouse, Bay street, cost $1,500; D. H. Atkison, six 2-storey brick dwellings, Grafton avenue, cost $12,000; McLean & Hopkirk, pair 2-storey and attic brick dwellings, Grace street, cost $6,000; N. H. Brady, 3-storey brick dwelling, Galley avenue, cost $3,000; Kew Beach Presbyterian Church, 1-storey brick church, Wineva avenue, cost $12,000; Kidney & McKelvey, 2½-storey stone and brick dwelling, Walmer road, cost $6,000; Wrigley Bros. 3-storey stone and brick store and dwelling, corner Bloor and Markham streets. cost $6,000; J. F. Scott, 4-storey brick dwelling and office, corner College street and La Plante avenue, cost $11,000; M. A. A. Cameron, 2-storey brick dwelling 724 Manning avenue cost $3,500; Mrs. Rankin, 2-story brick and stone store, 1072 Yonge street, $2,500; J. H. Stanford, 2-story brick dwelling, Westmoreland avenue, near Bloor street, cost $3,000; S. W. Simms, 2-story and attic brick and stone dwelling, Summerhill avenue, cost $3,500; Royce ave. Presbyterian church, brick and stone church, Toronto Junction, cost $5,000; A. J. Small, brick and wood alterations to building Adelaide street west, cost $3,000; W. E. Cunningham, pair 2-story brick dwellings, Margueretta street, near College, cost $4,400; H. Bonell, 2½-story brick dwelling, 330 Brunswick avenue, cost $2,000.

CONTRACTS AWARDED.

PAISLEY, ONT.—Supply of Hanover cement: A. Sinclair, $1.90 per barrel.

BARRIE, ONT.—Supply of cement: J. G. Scott and G. Leslie at $2.15 per barrel.

HARDING, MAN.—$4,000 5 per cent. school debentures J. W. Nay, Regina, purchaser.

NIAGARA FALLS, ONT.—Construction of sidewalks: Ferris & Spong, contractors, $3,971.

VICTORIA B.C.—Residence on Queens avenue for Mrs. A. R. Milne: D. H. Bale contractor.

BEAMSVILLE, ONT.—Construction of Silex walks in the town: The Pettypiece Silex Stone Co., Amherstburg, contractors, cost about $13,000.

AMHERST, N.S.— Methodist church building: James Reid, contractor, cost about $45,000.

EGANVILLE, ONT.—Construction of town hall: Walter Beatty, Pembroke, contractor, $11,610.

PETERBORO, ONT. — New carpet factory building: C. S. R. Dinnick, Toronto, contractor.

ST. BONIFACE, MAN.—25,000 lbs. half inch lead water pipe: Daoust & Norette, $5,70 per hundred.

TEULON, MAN. — Construction of Tenlon branch of the C.P.R.; Mr. Sinclair, St. James, Man., contractor.

NAPIERVILLE, QUE. — Napierville Junction Railway: Pacific Construction Co., Ottawa, Ont. controctors.

WINGHAM, ONT.—Erection of High school building: S. Bennett and W. Nicholson, contractors, cost $12,796.

TEVIOTDALE, ONT. — The James Stewart Manufacturing Co., Brockville, have received the contract for placing the Kelsey system of warming and ventilating in the public school building.

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ST. STEPHEN, N.B. — Waterwork construction: Water pipe, William Jacks & Co., Glasgow, Scotland, $33,920,35; construction work, J. L. McManus, of Memramcook. $35,035,30.

CARMAN, MAN. — Methodist church building: Brick and mason work, G. Elliott; carpenter work, W. Gardhouse; painting, Mr. Warlow, cost $18,000. White Winnipeg brick will be used.

ST THOMAS, ONT.—School building S. S. No. 14 Southwold: Masonry, J. A. Ponsford; carpentry, H. Lindop; slate roofing, C. Riddle; plastering; J. Stewart; painting D. Brown of Shedden. N. R. Darrach, architect.

STRATFORD, ONT. — Curling Club building: Mason work, E. Dunsmore, Downie; carpenter work, A. Pullyblank; galvanized iron work and plumbing, J. R. Myers; painting and glazing, A. E. Cash. T. Hepburn, architect.

MONTREAL, QUE.— New mountain outlook building: J. Quinlan, contractor, $16,000.—Royal bank building, St James street: Charles Thackray Co. contractors. —Construction of annex of Windsor hotel: Peter Lyall & Son, contractors.

TORONTO, ONT.—Kelsey system of warming and ventilating in Chalmers Sunday School building: James Smart Manufacturing Co., Brockville, Ont.—Stone crushing plant: Waterous Engine Works Company, Brantford, $1.830.

ST. JOHN, N.B. — Market improvements: Carpenter work, J. Corbett; masonry, R. J. Green; plumbing, R. E. Fitzgerald; painting, J. Pullen.—Waterworks supplied: Water pipe, D. Y. Stewart & Co., Glasgow, Scotland; eight inch, $32 a ton; six inch, $33; iron castings, Union Foundry $2.06 a hundred.

GALT, ONT. — Remodelling of the nurses' cottage: Masonry, S. Brauch, Preston; carpentry, J. McLelland plumbing, Norris & Lockhart; painting, R. McLeod; plastering, W. Mogg; galvanized iron work, W. J. McMurtry; metallic ceilings, Galt Art Metal Company, cost $2,164.90.

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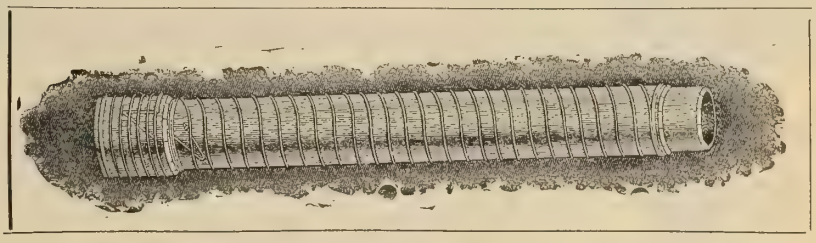

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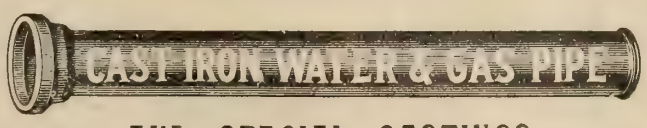

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heating and gas fitting, Pattison & Pfeiffer; plumbing, Young & Burnett, cost $10,000. Lawson & O'Gara, architects. —New fire hall building across Elbow river: T. Underwood, successful tenderer, $5,092.

FREDERICTON, N.B.—Construction of filtration plant: Low lift pump, John McDougall, Caledonian Iron Works Co., Montreal, $2,011; high dump pump, Allis-Chalmers-Bullock Co. Ltd., $14,650; mechanical filter equipment, B. Mooney & Sons, St. John. and the Continental Jewel Filtration Co. $20,514; clear water well, coagulating basin and building alterations B. Mooney & Sons, St. John and the New York Continental Jewel Filtration Co. $20,193,75.

WINNIPEG, MAN. — The Works Committee recommended the acceptance of the following tenders: One flushing machine, American Street Flushing Machine Company, $1,100; one flushing machine, St. Louis Flushing Machine Company $1,000; street sprinklers, Grose & Walker, $4,320.—Warehouse on Portage avenue for Codville, Georgeson Co.: Kelly Bros., Mitchell, Limited, contractors.—G. Campbell, Ottawa, secured the contract or a large section of rock work for the international Transcontinental Railway east of Winnipeg.—Campbell & Ferier, contractors, of Dululh, have the costract for construction of 80 miles of the Midland railway.

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Mr. James Wilson, of the John Ritchie Plumbing Company, Toronto, is recovering from his recent illness.

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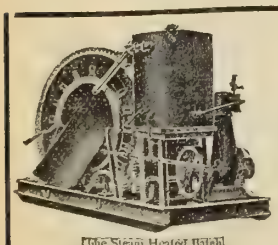
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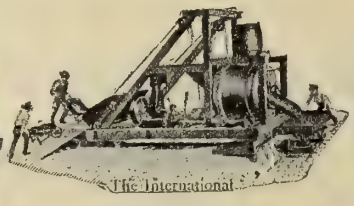
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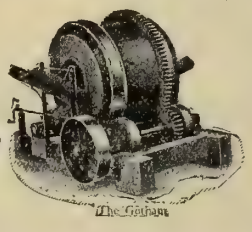
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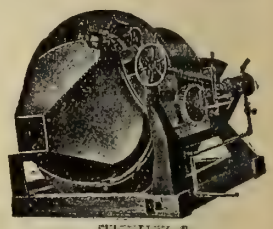
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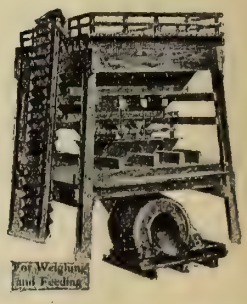
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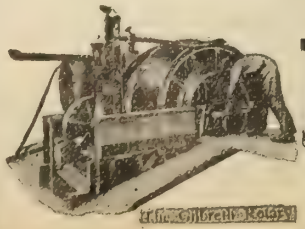
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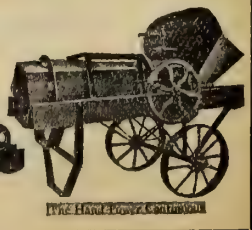
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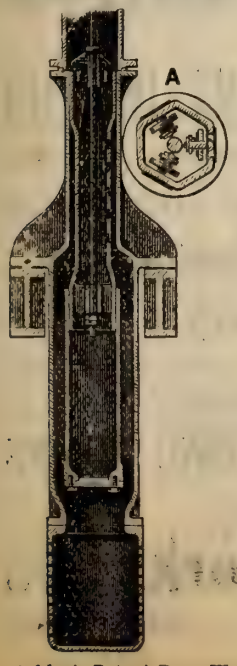

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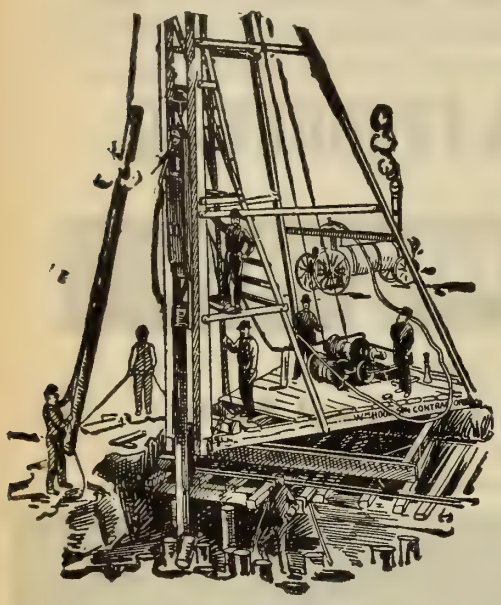

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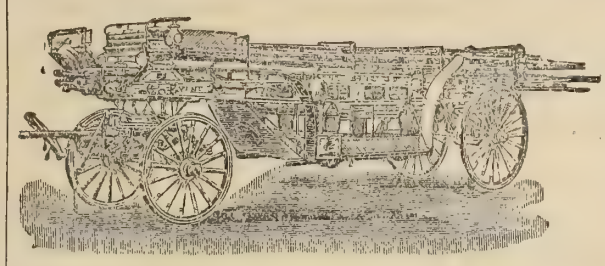

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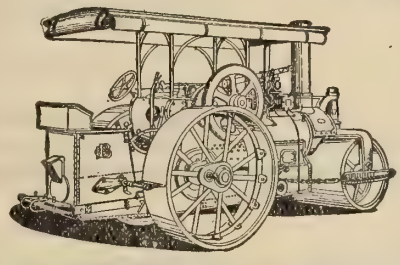

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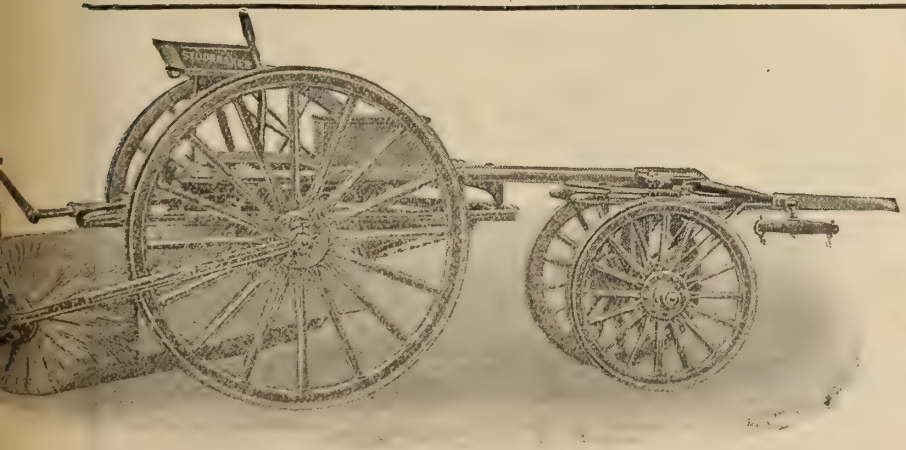

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Ohio Cobalt Mining Company, Limited, Haileybury, Ont., incorporated, capital $60,000. Directors, H. H. Smith, J. C. Ross and others.

University Mines, Limited, Toronto, incorporated, capital $1,000,000. Directors, G. Glendenning, W. J. Blair, H. L. Kerr.

Brethour Milling Company, Limited, London, Ont., incorporated, capital $250,000, to carry on the business of lumbering, etc. Directors, G. E. Coleman, B. V. Hole and others.

Argentite Mining & Smelting Company, Limited, Toronto, Ont., incorporated, capital $1,000,000. Directors, G. C. Loveys, W. B. Raymond and others.

International Electric Company, Limited, London, Ont., incorporated, capital $100,000. Directors, F. H. Potts, A. R. Bickerstaff and others, all of Toronto.

Central Foundry, Limited, Toronto, Ont., incorporated, capital $200,000. Directors, H. L. Bowers, H. T. Bush and R. C. Donald.

Iroquois Cobalt-Silver Mining Company, Limited, Haileybury, Ont., incorporated, capital $100,000. Directors, C. A. Richardson, J. L. Wheeler and H. D. Graham.

Silver Cliff Mining Company, Limited, Ottawa, Ont., incorporated, capital $2,000,000. Directors, W. D. Gregory, H. F. Gooderham and H. N. Barry, all of Toronto.

Erie Telephone Company, Limited, Selkirk, Ont., incorporated, capital $10,000. Directors, G. E. Dashner, A. E. Yager, and others.

Lawson Cobalt Silver Mining Company, Limited, Eganville, Ont., incorporated, capital $500,000. Directors, W. Lawson, D. F. McGregor, and others.

Ontario Iron & Steel Company, Limited, Toronto, (incorporated,) capital $5,000. Directors, D. Muhlfeder and J. L. Steefel, Albany, N.Y., and W. M. German, Welland, Ont.

Dunnville Gas Development Company, Limited, Dunnville, Ont., incorporated, capital $40,000. Directors, L. Werner, R. Bradford, O. E. Wilson and others.

Merriton Paper Mill Company, Limited, Merriton, Ont., incorporated, capital $300,000. Directors, C. G. Brown, H. G. Beach, and others.

Armstrong Manufacturing Company, Limited, Markdale, Ont., incorporated, capital $200,000 to manufacture and deal in woods, metal, etc. Directors, M. Armstrong, W. A. Armstrong and others.

Columbus Cobalt Silver Company, Limited, Toronto, incorporated, capital $450,000. Directors, H. S. Pritchard, F. Watt and F. C. Jarvis.

Wolstrees Cobalt Silver Mining Company, Limited, Windsor, Ont., incorporated, capital $250,000. Directors, J. W. Wolst, F. S. Kratzet, and others, all of Detroit, Mich.

North Range, Nickel & Iron Company, Limited, Sudbury, Ont., incorporated, capital $1,000,000. Directors, W. J. Bell, A. B. Gordon and J. Morin.

Victor Woodworks Limited, Amherst, N. S., incorporated, capital $100,000. Promoters, H. L. Hughson, F. L. Blair and others.

St. John's P. Q. Brick Company, Limited, St. John's Que., incorporated, capital $75,000. Promotors, J. Simards, U. Normandin and others.

Calgary Pressed Brick & Sand Stone Company, Limited, Calgary, Alta., incorporated, capital $100,000. Promoters, E. H. Grandall, G. A. Sharp and others.

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" Buff	35 00
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" No. 2	15 00
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1 inch No. 3 Pine cuts and better	38.00	40.00
1½ to 2 inch No. 3 cuts and better	40.00	42.00
1 inch Pine Dressing and better shorts	24.00	26.00
1 x 4, 6 and 8 Common	20.00	21.00
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1 inch mill run sidings	21.00	22.00
1 inch mill run	21.00	22.00
1 x 10 and 12 mill culls	17.00	18.00
1 inch dead cull sidings	12.00	13.00
1½ inch Flooring	27.00	28.00
Hemlock, 1 x 4 to 8 inch	16.00	17.00
2 x 4 to 8 inch, 12 to 16 feet	17.00	18.00
2 x 4 to 10 inch, 18 feet	18.00	19.00
1½ inch No. 1 4 ft. Pine Lath	4.50	5.00
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" 1½ inch to 2	23.00	25.00
Basswood, Common and better, 1 to 1¼ inch	23.00	24 00
Basswood, 1½ to 2 inch	24.00	26.00
Elm, soft, mill run, 1 to 1½ in.	23.00	24.00
Elm, rock, mill run, 1 to 1¼ in.	23.00	25.00
Maple, common and better, 1 to 1½ inch	22.00	23.00
Oak red plain, 1sts and 2nds, 2 to 4 inch	44.00	46.00
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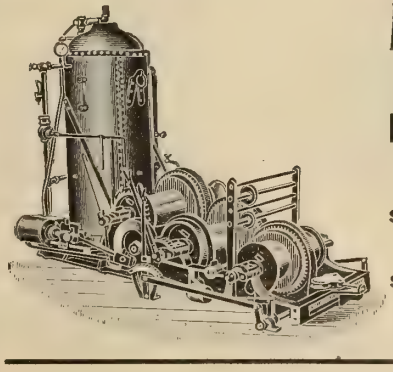

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BUSINESS NOTES.

Alderic Amiot and Casire Lemay, masons, Montreal, have registered their business under the name of Amiot & Lemay.

Martin Power, lumber dealer, Montreal, has registered his business under the name of The Steam Ship Supply Lumber Co.

The firm of Rogers & Rogers, planing mill, Barrie, Ont., has been dissolved. The business will be continued by Thomas Rogers.

The foundry at Hensall, Ont., has been sold to Hunt & Boyd, London, who will manufacture radiators and plumbing supplies.

Elie Mayer and Telesphort Ouimet, contractors, Montreal, have registered their business under the firm name of Mayer & Ouimet.

Hormisdas Riendeau and Joseph Remi Pepin, plumbers, roofers, etc., Montreal, have registered their business under the name of Riendeau & Pepin.

The Fairbanks Company, Limited, 444 St. James street, Montreal, Que., will be pleased to supply copies of the map of the district of Cobalt to readers of the CONTRACT RECORD on applioation.

A Builders' Exchange has been organized at Calgary, Alta., and the following officers elected : (President,) W. A. MacKinnon, of the Western Planing Mill Co.; vice-president, J. C. McNeil, contractor; secretary-treasurer, E. L. Richardson.

The London Pressed Stone & Concrete Company, Limited, London, Ont., have secured the rights for London and district to manufacture cement blocks under the patents of the Miracle Pressed Stone Co., of Minneapolis, Mr. W. G. Howlett, contractor, is manager of the Company and is contracting the German church of St. Paul of this material. Mr. Howlett states that his Company are well supplied with orders for these new blocks.

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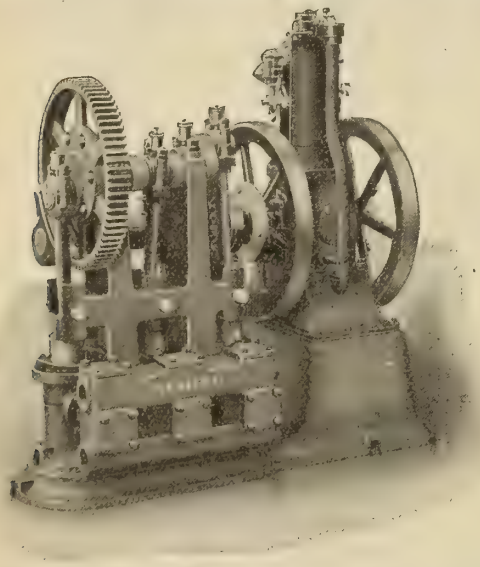
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MOST CONVENIENT FOR CUTTER WORK
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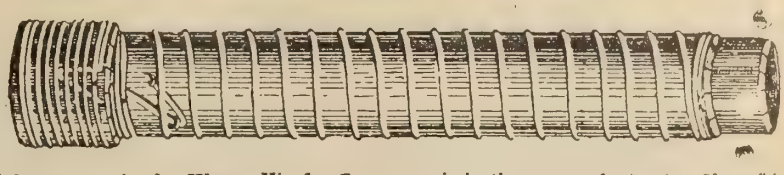

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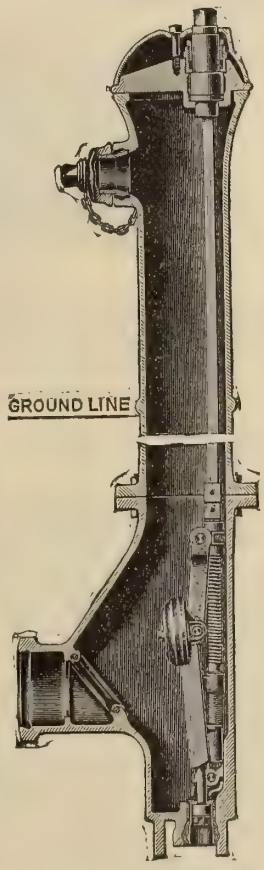

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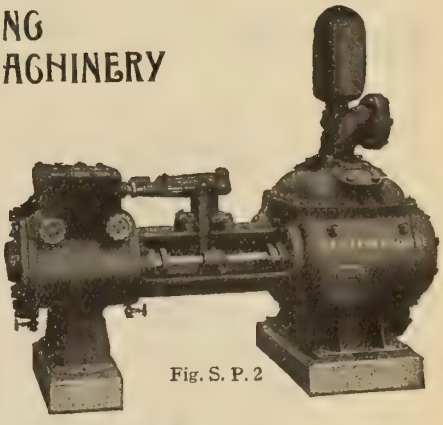

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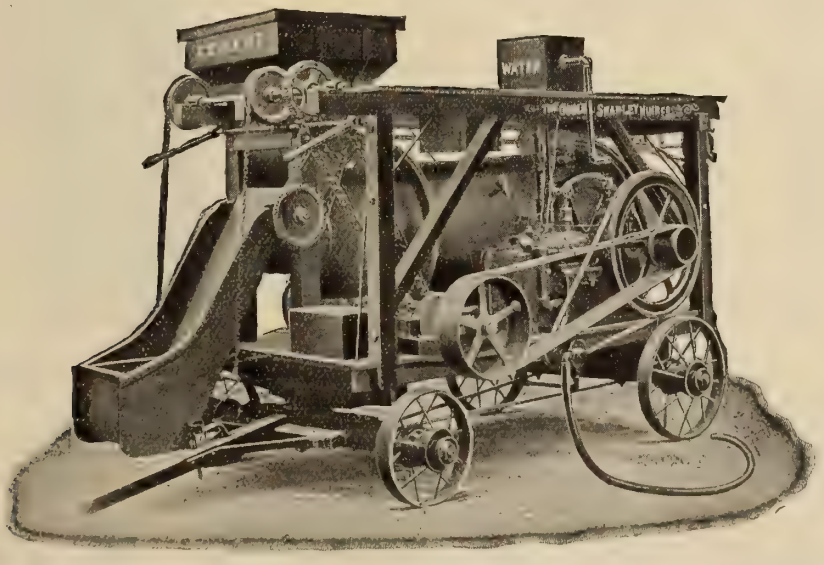

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VOL. 17. TORONTO, MONTREAL — JUNE 13, 1906 — WINNIPEG, VANCOUVER No. 15

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SEALED TENDERS

will be received by the undersigned up to 7 o'clock p m., MONDAY, 25TH DAY OF JUNE, 1906, for the construction of about 5 ,000 square feet of Concrete Walks.

Plans and specifications may be seen at the Town Clerk's Office. An accepted deposit cheque must accompany each tender as a guarantee of good faith. Lowest or any tender not necessarily accepted.

ROBERT COATES,
Town Clerk, Milton.

SEALED TENDERS

will be received up to MONDAY, JUNE 25TH, at 2 p m for the construction of a

Concrete Dam at Delhi, and Power House, Flume, etc.

Plans and specifications may be seen at the office of the Engineer, John S. Fielding, C. E., 15 Toronto street, Toronto, and the office of Messrs. Quance Bros., Delhi, Ont.; to either of which offices tenders may be sent.

The work involves about 1,800 cubic yards of concrete with necessary excavation and filling, etc.

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J. KELSO HUNTER,
City Clerk.

Regina, 22nd May, 1906.

Tenders Wanted

Whole and separate tenders will be received by the undersigned up to JUNE THE 15TH, 1906, for the building of a High School in the Town of Penetanguishene. Plans and specifications can be seen at the offices of the architect, Thomas Kennedy, Barrie, and at the office of Dr. McDonald, Penetanguishene.

REV. J. T. KIDD,
Secretary High School Board.

Penetanguishene, May 30, 1906.

CITY OF REGINA

Tenders for Fire Hose

Sealed tenders, marked "Tenders for Hose," will be received by the undersigned up to MONDAY, 18TH JUNE, 1906, at 5 o'clock p.m., for 1000 feet of cotton covered gum and wax hose for fire protection purposes.

The lowest or any tender not necessarily accepted.

J. KELSO HUNTER,
City Clerk.

Regina, May 29th, 1906.

Storage

IN BOND OR FREE

We have every facility to transfer, forward and store all kinds of merchandise. Two track warehouses. Low insurance rates.

TEES & PERSSE, LTD.
315-319 William Avenue,
Winnipeg.

Notice to Contractors

Sealed tenders endorsed "Tenders for South Branch Drainage Scheme," and addressed to John Mullin, Esq., Township Clerk, Cornwall Centre, Ontario, will be received up to 10 o'clock in the forenoon of the

18th DAY OF JUNE, A.D., 1906

for the construction of the South Branch Drainage Scheme, in the Townships of Cornwall and Charlottenburg.

The estimated quantities are as follows:
87479 cubic yards earth excavation.
2167 " hard pan and loose rock.
480 " rock.

The contractors are requested to send in tenders for the whole work in both Townships.

Plans and specifications may be seen at the office of John Mullin, Township Clerk, Cornwall Centre, and W. H. Magwood, Esq., Civil Engineer for the Township of Cornwall, Cornwall, Ont., on and after this date.

An accepted cheque for 10 per cent. of the amount of the tender for the work must accompany the same.

The lowest or any tender not necessarily accepted.

Dated at Cornwall this 18th day of May, A.D. 1906.

W. G. BENNETT, Reeve
JOHN MULLIN, Tp. Clerk.
By HARKNESS & MILLIGAN, Solicitors.

Tenders Wanted

Tenders will be received up to 3 p.m. of SATURDAY, JUNE 23RD, 1906, for the laying of Cement Sidewalks in the Town of Orillia.

Specifications may be seen at the office of the Town Clerk.

C. E. GRANT,
Clerk, Town of Orillia.

Tenders Wanted

Sealed tenders will be received by the architects by WEDNESDAY, JUNE 20, 1906, on a four-room addition to Mary Street School and new four-room school on Pine Ave. for the East Toronto Public School Board.

The lowest or any tender not necessarily accepted.

Plans and specifications may be seen at the store of W. T. Givens, East Toronto, and at the offices of

J. W. ELLIS & W. CONNERY,
Architects,
208 and 209 Manning Chambers.

NOTICE TO CONTRACTORS

The town of Amherst, Nova Scotia, invites bids fo the construction of about Sixteen Thousand Squar Yards of permanent Street Pavement and Sidewalks with curb and and gutter and required grading.

Contractors are asked to furnish full particulars and complete specifications as to pavement and sidewalk they are prepared to construct. Wood blocks or brick will not be considered.

Bids will be received up to MONDAY, JUNE 15TH, 1906, at 5 o'clock p. m.

Further particulars on application to the undersigned. The Council does not bind itself to accept any tender.

W. F. DONKIN,
Town Clerk.

Amherst, N. S., May 26th, 1906.

Department of Railways and Canals Canada

ST. LAWRENCE CANALS

MURRAY CANAL

NOTICE TO CONTRACTORS

Sealed tenders addressed to the undersigned and endorsed "Tender for Concrete Superstructures," will be received at this office up to 16 o'clock on FRIDAY, THE 15TH DAY OF JUNE, 1906, for the construction of Concrete Superstructures for the wooden piers at the entrance to the Murray Canal, and, Reinforced Concrete Bridges to span the openings between piers.

Plans and specifications of the work can be seen on and after Monday, the 21st of May, 1906, at the office of the Chief Engineer of the Department of Railways and Canals, Ottawa, and at the office of the Superintendent of Operation, Cornwall, Ont., at which places forms of tender may be obtained.

The Department does not bind itself to accept the lowest or any tender.

By order,
L. K. JONES,
Secretary.

Department of Railways and Canals,
Ottawa, 17th May, 1906.

[FOR ADDITIONAL ADVERTISEMENTS FOR TENDERS SEE NEXT PAGE.]

ARCHITECTURAL DRAUGHTSMAN, thoroughly experienced. Apply at once stating particulars. Box 83 Contract Record, Toronto.

SEALED TENDERS

will be received by the undersgined, addressed to the Chairman of the Board of Works, until 5 o'clock P.M. on FRIDAY JUNE 22ND, for the construction of approximately 30,000 feet of Concrete Sidewalk.

Plans and specifications may be seen and form of tender obtained upon application to H. Sydney Hancock, Jr., Town Engineer.

The lowest or any tender not necessarily accepted.

A. McNAUGHTON, Town Clerk.

Fort William, June 11, 1906.

Debentures for Sale

Town of Barrie, Ontario

Sealed tenders will be received by the undersigned up till 2 p.m. TUESDAY, JULY 3RD, 1906, for the purchase of the following Town of Barrie debentures. Guaranteed by the County of Simcoe. Electric light $27,000; public school, $22,500. 30 years 4½ per cent.

Principal and interest in equal annual instalments in each case. Payment and delivery at Bank of Toronto, Barrie. No tender necessarily accepted.

E. DONNELL, Clerk.

Barrie, June 9th, 1906.

NOTICE TO CONTRACTORS

TENDERS

Sealed tenders will be received until 6 o'clock p.m., on WEDNESDAY, THE 20TH DAY OF JUNE, A. D. 1906, for the erection of a Public Library building in the town of Perth. Tenders to be addressed to J. A. Kerr, Secretary Perth Public Library Board, Perth, Ont.

The lowest or any other tender not necessarily accepted. For plans and specifications and all other information apply to

G. T. MARTIN, Architect,
Perth, Ont.

Tenders Wanted

Sealed bids, marked "Tenders," will be received by the undersigned up to 5 P.M. TUESDAY, 3RD JULY, 1906, for the construction of the following works:

1. 140.000 sq. ft concrete sidewalk.
2. 26,000 feet water mains.
3. 22,000 feet main and lateral sewers.
4. 17,900 yards pavement on 10th, 11th, Broad, Rose and Hamilton streets.

Plans and specifications may be seen at the Engineer's office.

The lowest or any tender not necessarily accepted.

ANGUS SMITH,
City Engineer.

Regina, Sask., 7th June, 1906.

CITY OF BRANDON.

TENDERS FOR

STEEL BRIDGE

Sealed tenders will be received by the City of Brandon for the construction of a Steel Bridge for highway and electric railway traffic across the Assiniboine river on 18th Street.

The bridge will consist of two 105 feet spans on concrete piers.

Tenders will be received until 6 o'clock p.m. of TUESDAY, JULY 3, 1906.

A certified cheque on some chartered Bank of Canada, or cash deposit, equal to 5 per cent. of the amount of the tender, must accompany each tender as security for entering into a contract and for carrying out the contract.

Tenderers must submit plans and specification with tender. Plans of piers and all necessary information for tendering may be obtained on application to the undersigned or at the office of THE CONTRACT RECORD, Toronto. The City council does not bind itself to accept the lowest or any tender.

W. H. SHILLINGLAW,
City Engineer

Brandon, Manitoba, Canada, June 5, 1906.

TO CONTRACTORS.

Sealed tenders will be received up to JUNE 22ND., for all trades required in the erection of a residence in Walmer Road.

Plans and specifications may be seen at the office of the undersigned, to whom tenders are to be addressed.

The lowest or any tender not necessarily accepted.

F. S. BAKER, Architect,
Mail Building, Toronto.

TOWN OF SAULT STE. MARIE

Town Engineer

To take charge of Sewer Construction, Granolithic Walks and general Engineering works of the town.

Application will be received by the undersigned up to MONDAY, JUNE 25TH, for the position of Town Engineer of the Town of Sault Ste Marie, Ont.

Applicants are requested to state age, experience and Salary expected.

C. J. PIM, Town Clerk.

Paving Tenders

Tenders for the following pavements will be received up to 5 o'clock on THURSDAY, JUNE 21ST.

Vitrified brick pavement on Talbot Street.
Vitrified brick pavement on Market Lane.
Vitrified brick pavement on York Street.
Macadam pavement with Kentucky Rock Asphalt on King Street.

Lowest or any tender not necessarily accepted.

Plans, specifications and form of tender at this office.

A. O. GRAYDON,
City Engineer.
ALD. WM. GERRY, London. Ont.
Chairman No. 2 Committee.

Tenders Wanted

Tenders will be received at my office until noon of SATURDAY, 30TH JUNE, 1906, for the following steel, pile and trestle rivet connected bridges:

Town Line of Dover East and West, length 90 feet.

Front of Seventh Con., about line lots 1 and 2, length 72 feet

Front of Seventh Con, at Jacob's Road, length 63 feet

Front of Fourteenth Con., at Rankin Creek, length 70 feet.

Each of above shall have 30 foot centre span, 16 foot roadway, 14 feet above creek bed, 3 inch pine planking. Alternative tenders for concrete abutments at shore ends, and also for reinforced concrete structures throughout will be considered, details of special constructions to be attached.

Plans and specifications, after Saturday, 16th inst A satisfactory marked cheque for $100 in favor of Treasurer, Dover Township (to be held as a guarantee of good faith, until an approved contract for the work is executed and security for its completion furnished) to accompany each tender, and to be forfeited to the Township in case of failure on part of contractor to enter into satisfactory written contract when notified to do so. The lowest or any tender not necessarily accepted. Address,

J. W. SHACKLETON, C E.,
Chatham, Ont.

CONTRACTS OPEN.

FROBISHER, SASK.—C. P. R. will build a new station, cost $4,000.

SHOAL LAKE, MAN.—R. Randall purposes erecting a flour mill here.

SOMERSET, MAN.—M. Landry is preparing to erect a brick residence.

SWIFT CURRENT, SASK.—A new flour mill is to be erected south of the town.

GLACE BAY, N.S.—Plans have been prepared for the new school building at No. 6.

STRATHCLAIR, MAN. — J. M. Grassie will build a new hotel, cost $8,000.

RAPID CITY, MAN.—The Union Bank purposes erecting a new building, cost $5,000.

REDVERS, SASK.—The Presbyterian congregation have decided to erect a new church.

FORGET, SASK. —The Protestant denominations have decided to build a church here.

WOLSELEY, SASK.—E. C. Brown has taken tenders for erection of a town and firehall here.

HALIFAX, N.S.—F. W. W. Doane, City Engineer, has taken tenders for work on sewers.

GLENCOE, ONT. — A by-law has been carried to loan $8,500 towards a knitting factory.

KINGSTON, ONT.—The by-law to raise $85,000 for lighting plant extensions has been carried.

ROSTHERN, SASK.—The town is considering the installation of a gas plant, cost about $10,000.

HULL, QUE. — The Council have passed a by-law ordering the building of sidewalks and sewers.

ST. JOHNS, QUE.—J. E. Benoit, architect, has plans prepared for an office building for N. Lord.

MELITA, MAN.—T. S. Menarey has taken tenders for alterations to the Oddfellows' Hall building.

CARBERRY, MAN.—A by-law has been carried to raise $9,000 for installing a fire fighting apparatus.

HARDING, MAN. — Tenders have been taken by Rev. G. Benner for erection of a brick parsonage.

BATTLEFORD, SASK.—It is said that a Toronto capitalist has decided to erect a grist mill and elevator here.

YORKTOWN, SASK.—T. Stait and M. B. Appleton intend erecting a two-storey brick building on Broadway.

DUNDAS, ONT.—John Bertram & Sons, Company, have taken tenders for the erection of a large machine shop.

THOROLD, ONT. — The town Council will submit a by-law for construction of a waterworks system here.

BRACONDALE, ONT. — J. E. Edwards & Sons purpose building an addition to their premises, cost $8,000.

MEADOWS, MAN.—H. M. Helliwell will receive tenders up to June 16th for erection of a school building and shed.

SAPPERTON, B. C. — Plans have been prepared for new sawmills to be erected here for the Brunette company.

INGERSOLL, ONT.—The Board of Trade favor a loan of $20,000 to T. Waterhouse & Co. for a knitting factory.

NEWCASTLE, N. B. — T. Foley, proprietor of the Hotel Miramichi, is preparing to erect an additional building.

KEENE, ONT.—W. H. Oliver, C. Donnelly and T. T. Oliver intend erecting summer cottages on Hickory Island.

PORTAGE LA PRAIRIE, MAN.—The London Fence Ltd., have taken tenders for erection of a factory building here.

LONG CREEK, P. E. I. — W. E. Stretch will receive tenders up to June 16th for additions to Baptist church building.

PICTON, ONT. — The town and county councils have each granted $15,000 towards a new collegiate institute building.

ORILLIA, ONT.—C.E. Grant, Town Clerk, will receive tenders up to June 16th for laying cement sidewalks in the town.

WARMAN, SASK.—A. Marcotte intends erecting a large elevator.—The C. N. R. purpose building stock yards at this point.

EDMONTON, ALTA.—J. B. Gardner has bought property on Jasper street on which he intends erecting a large office building.

CLANWILLIAMS, MAN. — R. A. McQuarrie will receive tenders up to June 15th for erection of a brick veneer school house.

WHITEWOOD, SASK. — C. A.

THE SMITH CONCRETE MIXER

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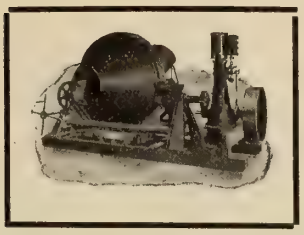

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Railway, Mining and Contractors' Supplies
MONTREAL

Baldwin will receive tenders up to June 1st for purchase of $2,000 six per cent. town debentures.

BAIE ST. PAUL, QUE.—It is expected the R. C. church here will be replaced by a new building to cost $75,000.

MAGOG, QUE.—The Town Council have passed a by-law to raise $30,000 for purchase of waterworks and improvements to the plant.

SAULT STE. MARIE, ONT.—C. J. Pim, Town Clerk, will receive tenders up to June 20 for construction of granolithic sidewalks in the town.

FRANKLIN, MAN.—E. H. Sharpe has taken tenders for erection of a wing and making alterations in the school building S. D. No. 780.

DARTMOUTH. N.S. — The Nova Scotia Telephone Co., have taken tenders for alterations and improvements to a building on Water street.

MORTLACH, ALTA.—It is understood that the Lake of the Woods Milling Co., and Winnipeg Elevator Co., will each build elevators here.

CHATHAM, ONT. — Tenders have been taken for the remodelling of residence on Lacroix street for F. Stone. J. L. Wilson & Son, architects.

SARNIA, ONT. — Mr. Faucette, architect, is preparing plans for additions to the King Milling Company's building, and to the Arlington Hotel.

PORT COLBORNE, ONT. — The Montreal Corn Exchange have decided to petition the government to erect a 2,000,000 bushel elevator here.

STRATHCONA, ALTA. — The C.P.R. have made arrangements with the Town Council by which roundhouse, car shops, etc., will be erected here.

CHARLOTTETOWN, P.E.I.—Tenders have been taken at the Department of Public Works for rebuilding of Sherry's Bridge, Queen's County.

LANSDOWNE, ONT.—Miss E. L. Monfort will receive tenders up to June 10th for erection of residence. Plans with B. Dillon, architect, Brockville.

MEAFORD, ONT.—Mr. Kilgour, a promoter of the Huron & Ontario Electric Railway, has been looking for a route for entrance of that line into the town.

MILESTONE, SASK.—A new brick school building is to be erected here, cost $8,000.—The Canada Flax & Fibre Co., of Montreal, will build a large mill and elevator.

CORNWALL, ONT. — The Town Council gives notice of its intention to construct granolithic sidewalks on Duncan, Marlborough, First and Fourth streets.

MACLEOD, ALTA. — A new flour mill and elevator is to be built here, cost $22,000.—The by-law to provide $95,000 for waterworks system has been passed.

HENSALL, ONT.—Tenders will be received by A. G. Smillie, Township Clerk, up to June 23rd for construction of cement culverts in the Township of Tuckersmith.

WOODSTOCK, ONT.—Tenders will be received up to June 23rd for erection of a two-storey brick house on Wellington street for R. McIntosh. Plans with A. McPherson.

MEDICINE HAT, ALTA.—W. H. Doty intends erecting a business block. —W. Cousins has purchased a site on South Railway street for theatre and business block.

GUELPH, ONT.—D. McDonald & Bros. have purchased the premises where they have been conducting business and it is understood extensive improvements will be made.

LETHBRIDGE, ALTA.—W. Oliver has purchased a site on Round street for a brick block.—The Bank of Commerce have purchased a site on Redpath street for a new building.

FORT FRANCIS, ONT.—The Town Council gives notice of its intention to construct a sewer on First street, from Mowat to the intersection of Front street and Central aveuue.

MONCTON, N.B. — L. K. Jones Department of Railways and Canals, Ottawa, Ont., will receive tenders up to June 15th for erection of freight car repair shop on I. C. R.

PORT ELGIN, ONT.—A by-law has been carried to install a system of waterworks to cost $30,000, also a by-law to loan $10,000 to Stevens, Hepner & Co., to erect a broom factory.

AMHERST, N.S. — The Amherst Malleable Iron Co. intend erecting a brick building 300 x 75 feet.—R.C.Fuller & Co. intend enlarging their block, corner Victoria and Church streets.

FORT WILLIAM, ONT.— A. McNaughton, Town Clerk, will receive tenders up to June 22nd for construction of granolithic sidewalk on McVicar, May, Ridgeway and Gore streets.

ST. CATHARINES, ONT.—R. A. Speakman, Civil Engineer, will receive tenders up to June 16th for construction of asphalt block pavement on Church street from Ontario to Niagara.

HAILEYBURY, ONT. — Connor, Clarke & Monds, consulting engineers, Toronto, are making a report on the development of the Hounds Chute water power, on the Montreal river, for this town.

WALKERVILLE, ONT.—Dr. C. W. Hoare is taking tenders for erection of a residence on Wyandotte street.—A. W. Ridout is receiving tenders for erection of Bank of Commerce building on Devonshire road.

DELHI, ONT.—Tenders will be received up to June 24th for construction of a concrete dam and power house, flume etc. Plans with J. S. Fielding, C. E., 15 Toronto street, Toronto, and with Quance Bros.

TAVISTOCK, ONT.—The Township Council of South Easthope will offer for sale the following debentures: Stewart drain, $1,256,45; central drain repair $3,450; William drain, $3,720 and Erb drain, $1,810,50.

WALKERTON, ONT. — F. Frook, Reeve, will receive tenders up to June 15th for erection of a bridge on 15th side line Brant. He will also receive tenders up to the 23rd inst. for construction of 60 foot steel bridge in the 14th Con. Brant.

LONDON, ONT. — The following building permits have been issued :—D. L. Harding, two-storey brick residence, east English street; F. D. Neeley, a brick veneer residence, St. Patrick street; J. C. Snell, two-storey brick residence, Central avenue.

VANCOUVER, B.C.— The North Vancouver Ferry & Power Company purpose enlarging and remodelling the city terminal, foot of Carrall street.—Grant Henderson, architects, are preparing plans for additions to St. Andrew's Presbyterian church.

IBERVILLE, QUE. — F. Gelinas, Department of Public Works, Ottawa, will receive tenders up to June 19th for erection of a Public building. Plans at the Department and with the Postmaster here.—J. E. Benoit, architect, St. John, is preparing plans for a building for S. McDonald.

NEW WESTMINSTER, B.C.—Architect Clow is preparing plans for the new wing to the school building for which tenders will soon be taken.—The Westminster Pipe Company have been granted a record of water from Gold Creek and will begin erecting a plant for the manufacture of wooden pipe.

QUEBEC, QUE.—F. Gelinas, Department of Public Works. Ottawa, will receive tenders up to June 15th for dredging at Doucet's Landing, L'Asomption and Berthier Channel, Que., plans at the department.—L. K. Jones, Department of Railways and Canals, Ottawa, has taken tenders for supplies of cement for Quebec canals.

WELLAND, ONT.—Dr. Howell has purchased the building occupied by G. Stalker, which he will have remodelled. —G. H. Pettit, Box D, will receive tenders up to June 15th for the erection of a brick residence.—Goodsir & Waite, St. Catharines, will receive tenders up to June 13th for erection of a brick store.

WOODSTOCK, N.B.—L. E. Young is preparing to erect a three-storey building on the site of the one recently burned.—Garden Bros. also purpose rebuilding.—A local syndicate is considering the erection of a large building here.

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—Mrs. Loane & Co. are preparing for erection of a new building. — H. N. Payson is preparing to erect a brick building on the site of the one recently burnt.

PETERBORO, ONT. — The residents on King street have petitioned for a granolithic walk on King street.—The Board of Works have decided to repair Smith street bridge.—F. Mason will make extensive additions to his greenhouse on Water street.

HAMILTON, ONT.—C. Mills, architect, has been instructed to prepare plans for a new Y.W.C.A. building, to cost $50,000.—F. Gelinas, Department of Public Works, Ottawa, will receive tenders up to June 29th for erection of a drill hall. Plans at the department and with Stewart & Witton, architects.

SAULT STE. MARIE, ONT.—Tenders are being taken for a new stone Church for St. Andrew's Congregation. L. A. Green, B. A. is Secretary of Committee. Also for a brick and stone High School building, J. H. Huggill, Secretary. Plans with Jas. Townsend, architect, 123 Bay street Toronto.

SASKATOON, SASK. — Tenders have been taken for the erection of an English church rectory.—R. J. Barry, proprietor of the Butler Hotel, intends having that building enlarged.— F. J. Robinson, Deputy Commissioner of Public Works, Regina, will receive tenders up to June 25th, for construction of four concrete piers and two abutments for a traffic bridge over the Saskatchewan river. Plans with above named.

CALGARY, ALTA. — The Calgary Milling Co. have taken a permit for erect on of five-storey mill 95 x 35 feet.—W. R. Brock Co., Toronto, have purchased a site for a building for a branch of their business.—The Ames Holden Shoe Co., Montreal, and the Thomas Ryan Co., Winnipeg, have decided to locate branches here. — McIntosh Carriage Co. have decided to erect a large warehouse here for their business.

REGINA, SASK.—Angus Smith, City Engineer, will receive tenders up to July 3rd for construction of concrete sidewalks, water mains, sewers and pavements. Plans at Engineer's office.—It has been decided to erect a Masonic temple to cost $75,000.—W. W. La Chance, architect, has prepared plans for a three-storey brick block on Scarth street, for J. H. Haslam, cost $25,000. — Same architect has prepared plans for an apartment block on Smith street, also for a store on South Railway street for C. P. Reil.

STRATFORD, ONT. — The following building permits have been issued: J. F. Gilliland, brick veneer residence, Wells street; S. L. Ireland, brick residence, Nelson street; George Litt, brick residence, Front street; Dr. Daisy Macklin, brick residence, Ontario street; F. R. Vanstone, brick veneer residence, Cobourg street; W. J. Mooney, jr., brick veneer residence, Avon street;

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HALIFAX: Awarded contracts for 30,000 sq. yds.—May 15, 1906.
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Best English Cements. Best Belgian Cements
W. McNALLY & CO., Montreal

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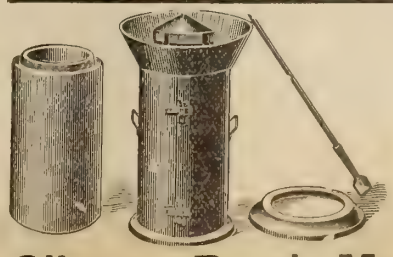

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Climax Road Machine Co., 64 King East, HAMILTON, CANADA

Stratford Curling Co., Ltd., frame rink, Water street; Chas. Brogden, brick veneer residence, Ontario street; Mooney Biscuit and Candy Co., brick factory, Downie street; W. H. Schenck, brick veneer residence, Centre street.

MONTREAL, QUE.—Plans for the new Vaudeville theatre are being prepared and it is expected that building will soon begin.—It is expected that the Horseshoe Brewery Company will establish a branch here.—The following building permits have been issued:—Royal Bank of Canada, building on St. James sreet, cost $300,000; Montreal Light, Heat & Power Co., seven-storey building corner St. Urbain and Craig streets, cost $200,000.—Linton Estate will erect a ten-storey apartment house corner of Simpson and Sherbrooke streets, Finley & Spence architects.—L. O. David, City Clerk, will receive tenders up to June 20th for erection of a fire station on Berthelet street. Plans with A. F. Dunlop, architect.—The G.T.P.R. propose erecting a ten-storey building on McGill street to cost $200,000.—The Police Committee consider a new building necessary for police station No. 13.—O. Lamaneux will erect two brick and stone dwellings on St. Ambrose street to cost $5,500.—Tenders will be received by the City Clerk, up to June 15th for alterations and repairs to City Hall. Plans with L. R. Montbriant, architect.

OTTAWA, ONT.—The City Council gives notice of its intention to construct bitulithic pavement on Elgin street, cost $60,861,65 also a number of concrete sidewalks.—The following building permits have been issued:— Mrs. W. Spencer, brick veneered dwelling, Third avenue, $1,500; Miss Edith Taylor,

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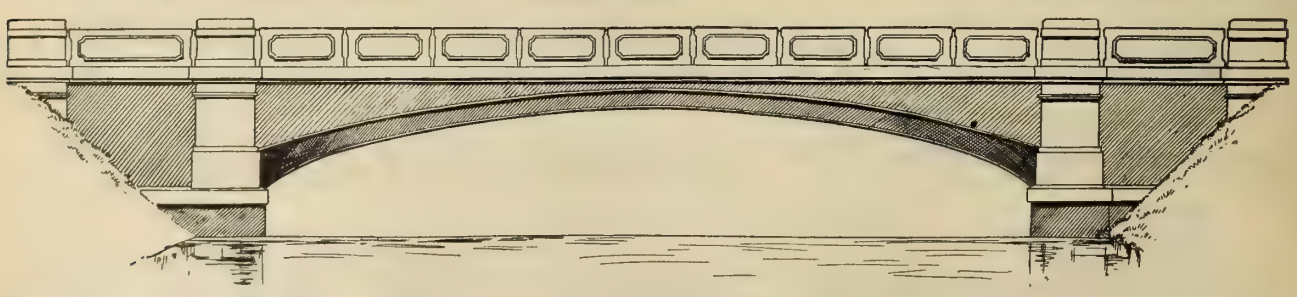

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three solid brick houses, Lisgar street, $6,000; W. R. Queale, five solid brick houses, Elgin street, $12,000; Rev. G. I. Campbell, three brick veneered dwellings, Maple street, $4,500; W. J. Usher, brick veneered double house, Second avenue, $4,000; J. B. Brisson, brick veneered dwelling, Chapel street, $1,200; Dr. A. S. McElroy, solid brick house, Bank street, $7,000; Ottawa Tennis club, club house, Third avenue, $1,200; C. H. Bellamy, brick veneered dwelling McLeod street, $1,700. — L. R. Jones, Department of Railway and Canals, will receive tenders up to June 30th for supply of 1750 barrels of Portland Cement for Rideau Canal.—The City Council will soon offer for sale improvement debentures to value of $275,000.

WINNIPEG, MAN.—The Y.W.C.A. are soliciting subscriptions for their new building on Ellice avenue, cost $75,000. H. B. Rugh, architect.—J. Woodman, architect, has taken tenders for erection of a residence for W. S. Becher.—Blair & Northwood, architects, have taken tenders for erection of brick and stone office buildings at Qu'Appelle and Melita.—On June 28th a by-law will be voted on for the issue of $200,000 debentures for school purposes.—Darling & Pearson, architects, will receive tenders up to June 16th for erection of brick church, corner Broadway and Walnut streets for the Baptist congregation.—Same architects are preparing plans for a block on Lemoine street for Bank of Commerce, cost $15,000.—H. B. Rugh, architect, has taken tenders for a residence in Cresentwood for L. O. Kirby.—Same architect is preparing plans for a three-storey block on Gertie street, for the Frontenac Building Co., cost $30,000.—J. A. Senecal, architect, has taken tenders for erection of a hospital on Sherbrooke street for the Sisters of Misericorde.—F. R. Evans, architect, has taken tenders for erection of a brick and stone residence on Donald street.—J. H. G. Russell, architect, will receive tenders up to June 14th for erection of two brick residences on Kennedy street.

TORONTO, ONT.—A Jewish Synagogue is to be built on the site 107-9 Teraulay street, to cost $30,000.—St.

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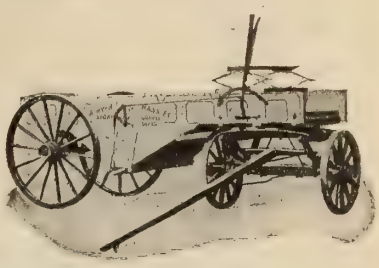

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Mark's Anglican church, Cowan avenue, purpose erecting a Sunday School building, cost $5,000.—The Gerhard Heintzman Co. have purchased a site corner Broadview and Eastern avenues for factory building.—Plans have been prepared for a three-storey building for Alexandria Industrial school, also repairs on the old building.—Plans for Phoebe street school have been accepted, and tenders will soon be called, cost about $110,000.—The Board of Control will receive tenders up to June 19th for construction of asphalt pavement on Walmer road, Beatrice street, Salisbury, Lobb and Bernard avenues, brick pavement on Argyle street, bitulithic on McMaster and Concord avenues, and vitrified block on Lake street; for sewer construction on Hampton, Springhurst and Ossington avenues, also for a number of concrete sidewalks. — The C.P.R. C.N.R. and G.T.R. have agreed to erect a building on the Exhibition grounds.—Plans are being discussed for the enlargement of the Parliament buildings.—A syndicate of New York capitalists have been looking for a site here for the establishment of a large cheese making industry.— F. H. Herbert, architect, is taking tenders for erection of three residences on Huron street, for W. Duckworth.—Tenders are being received at 345 College street, for alterations to a dwelling.—The Ontario Government will grant $6,000 towards an experimental station to investigate sewage disposal system.—The City Council gives notice of the passing of a by-law to provide for the issue of $184,425 improvement debentures. — The Board of Control will receive tenders up to July 3rd for the decoration of the Mayor's office etc. Plans at Property Department, City Hall. — Burke & Horwood, architects, will receive tenders up to June 15th for erection of Centennial Methodist church Dovercourt rd.—Building permits have been issued as follows: J. Cunningham, 2-story brick and stone dwelling, Lucas street, cost $2,600; E. E. Rutherford, pair 3-story brick dwellings, Beatrice street, cost $6,000; R. J. Wilson, 2-story brick and stone dwelling, Woolfrey avenue, cost $3,000; M. A. Steel, 2-story and attic stone and brick dwelling, Broadview avenue, near Victor, cost $3,000; Sarah Barton, pair 2½-story brick dwellings, Barton avenue, cost $6,000.

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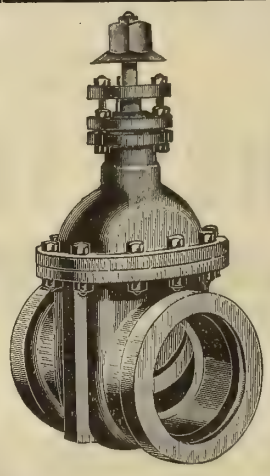

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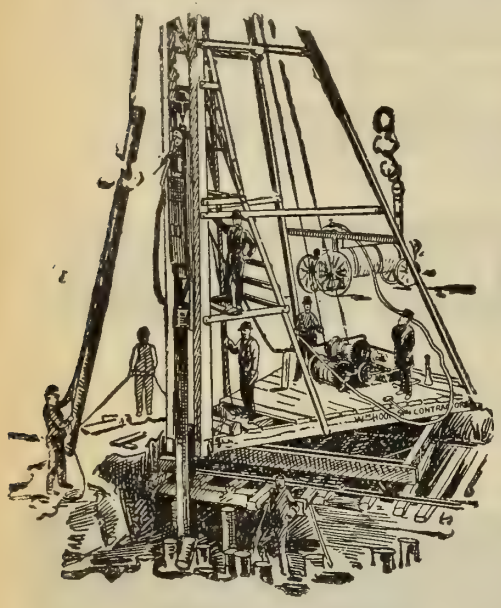

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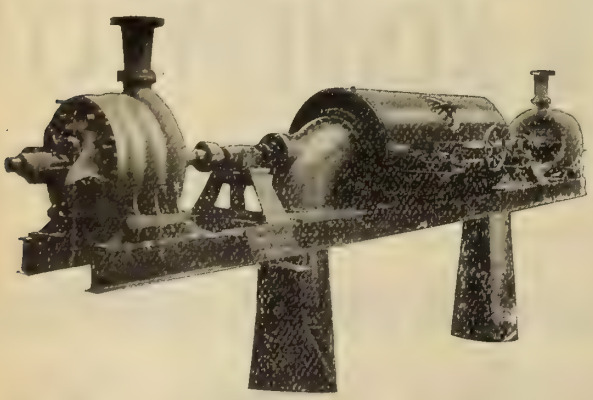

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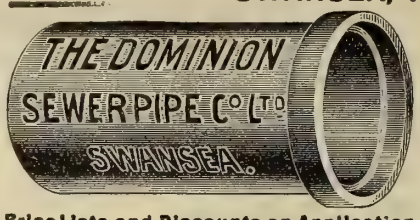

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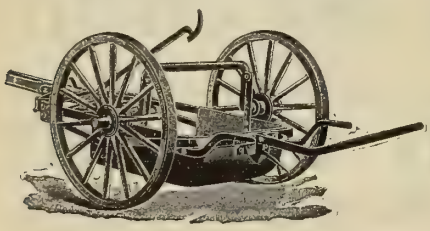

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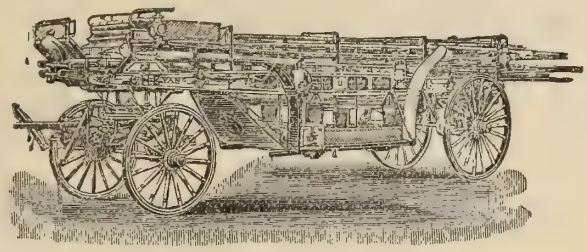

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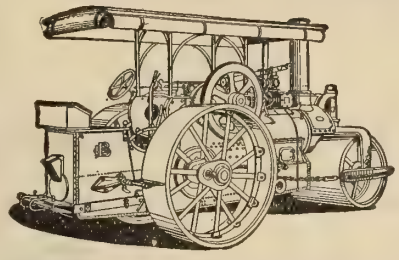

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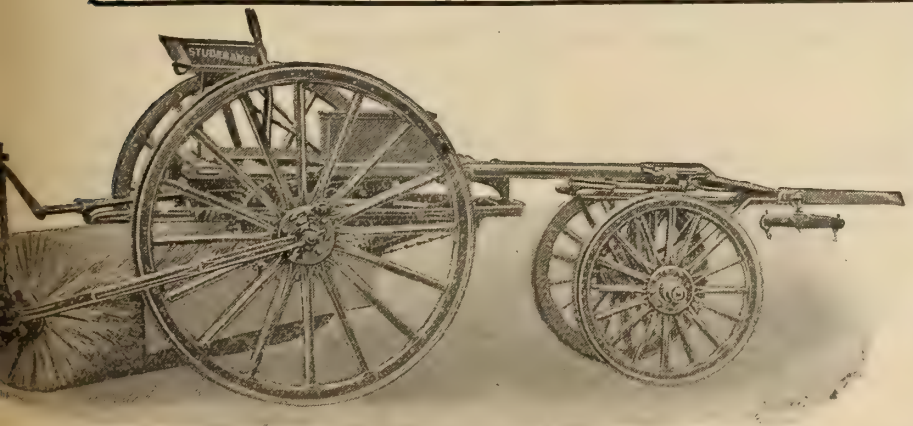

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ST. BONIFACE, MAN.—Erection of school building: T. H. Tremblay, contractor, $52,820.

SWIFT CURRENT, SASK.—$10,000 school debentures: J. W. Nay, Regina, purchaser.

WAPELLA, SASK.—$10,000 town debentures: March Bros. & Wells, Winnipeg, purchasers.

FREDERICTON, N.B.—Residence on Church street for Col. Loggie: H. M. Clark, contractor.

WOODSTOCK, ONT.—Construction of new reservoir in south-west of city: Toronto Contracting & Paving Co., $9,552.

SARNIA, ONT.—Construction of pavement on George street: A. J. Murphy, Port Huron. Stone curb, 45 cents a foot; asphalt block, $2.20; field tile, 5 cents a foot.

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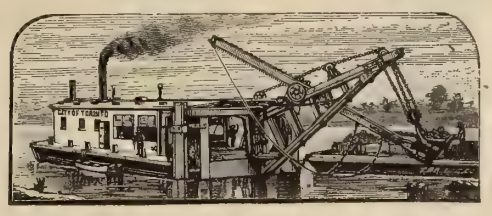

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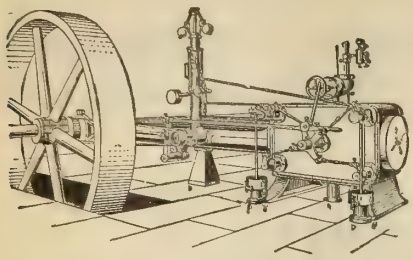

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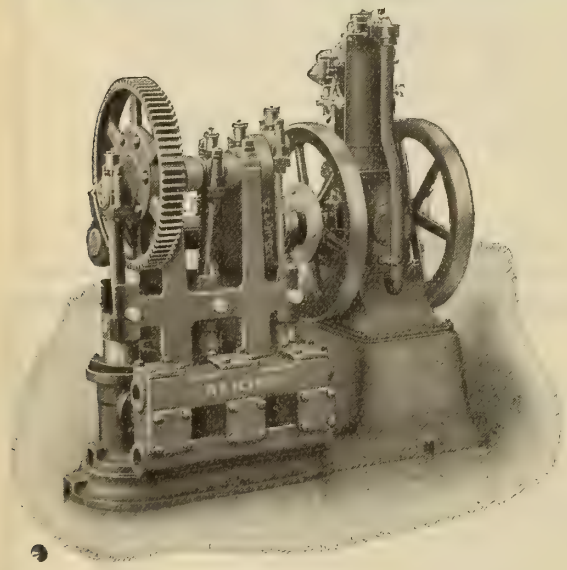

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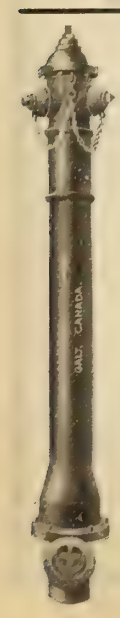

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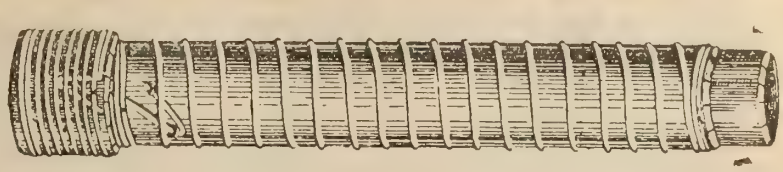

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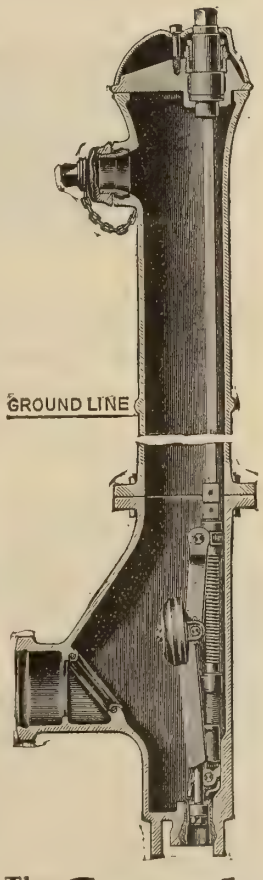

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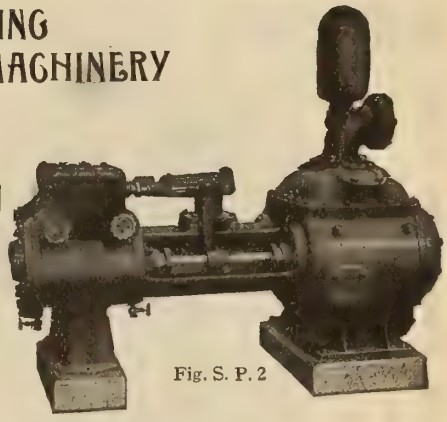

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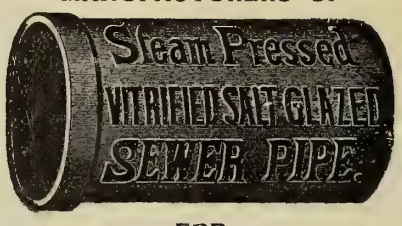

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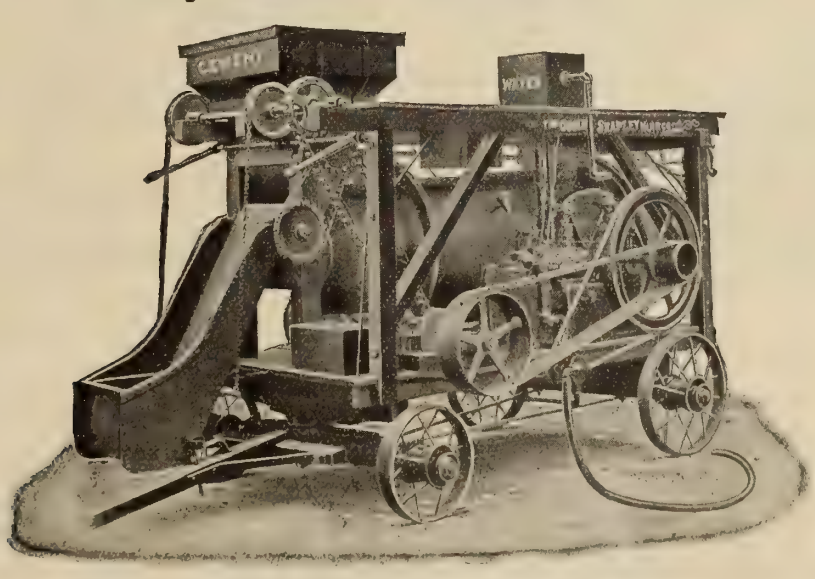

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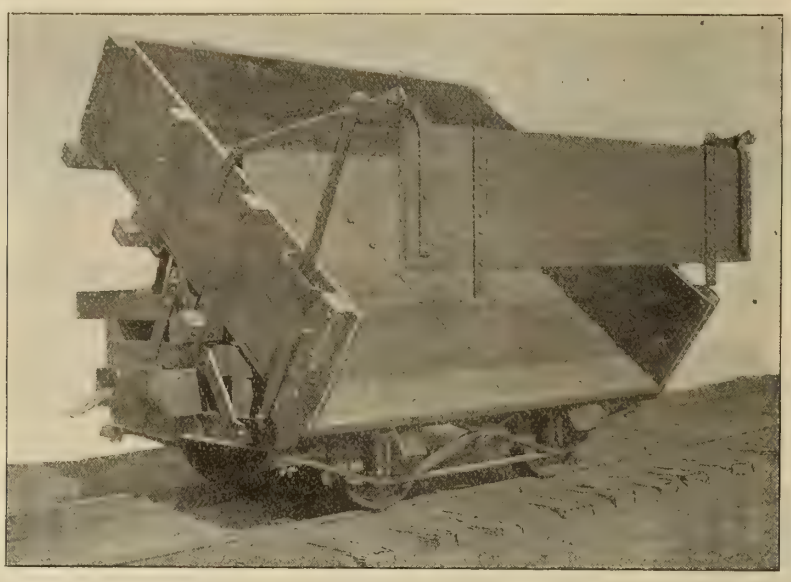

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VOL. 17. TORONTO, MONTREAL — JUNE 20, 1906 — WINNIPEG, VANCOUVER No. 16

THE CANADIAN CONTRACT RECORD

PUBLISHED EVERY WEDNESDAY

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will be received by the undersigned up to 7 o'clock p. m., MONDAY, 25TH DAY OF JUNE, 1906, for the construction of about 52,000 square feet of Concrete Walks.

Plans and specifications may be seen at the Town Clerk's Office. An accepted deposit cheque must accompany each tender as a guarantee of good faith. Lowest or any tender not necessarily accepted

ROBERT COATES,
Town Clerk, Milton.

SEALED TENDERS

will be received up to MONDAY, JUNE 25TH, at 2 p.m. for the construction of a

Concrete Dam at Delhi, and Power House, Flume, etc.

Plans and specifications may be seen at the office of the Engineer, John S. Fielding, C. E., 15 Toronto street, Toronto, and the office of Messrs. Quance Bros., Delhi, Ont., to either of which offices tenders may be sent.

The work involves about 1,800 cubic yards of concrete with necessary excavation and filling, etc.

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ELECTRIC LIGHT MACHINERY

The Corporation of the City of Regina will receive tenders until JULY 2ND, 1906, for the supply of a 100 k. w., 3 phase, 2200 volt, 300 r.p.m., revolving field generator, direct connected to a 150 h.p. automatic cut-off engine, with direct connected exciter, one generator panel and one feeder panel, with instruments and controlling switches, etc. Specifications may be obtained by applying to the City Clerk, City of Regina.

J. KELSO HUNTER,
City Clerk.

Regina, 22nd May, 1906.

Debentures for Sale

Town of Barrie, Ontario

Sealed tenders will be received by the undersigned up till 2 p.m. TUESDAY, JULY 3RD, 1906, for the purchase of the following Town of Barrie debentures. Guaranteed by the County of Simcoe. Electric light, $27,000; public school, $22,500. 30 years 4½ per cent.

Principal and interest in equal annual instalments in each case. Payment and delivery at Bank of Toronto, Barrie. No tender necessarily accepted.

E. DONNELL, Clerk.

Barrie, June 9th, 1906.

CITY OF BRANDON.

TENDERS FOR

STEEL BRIDGE

Sealed tenders will be received by the City of Brandon for the construction of a Steel Bridge for highway and electric railway traffic across the Assiniboine river on 18th Street.

The bridge will consist of two 105 feet spans on concrete piers.

Tenders will be received until 6 o'clock p. m. of FRIDAY, JULY 13, 1906.

A certified cheque on some chartered Bank of Canada, or cash deposit, equal to 5 per cent. of the amount of the tender, must accompany each tender as security for entering into a contract and for carrying out the contract.

Tenderers must submit plans and specification with tender. Plans of piers and all necessary information for tendering may be obtained on application to the undersigned or at the office of THE CONTRACT RECORD, Toronto. The City council does not bind itself to accept the lowest or any tender.

W. H. SHILLINGLAW,
City Engineer

Brandon, Manitoba, Canada, June 5, 1906.

Department of Railways and Canals

RIDEAU CANAL

NOTICE TO DEALERS IN CEMENT

Sealed tenders addressed to the undersigned and endorsed "Tender for Cement," will be received at this office until 16 o'clock on SATURDAY, THE 30TH JUNE, 1906, for the supply of 1,750 barrels of Portland Cement, to be delivered in sacks.

Specifications can be procured at the office of the Superintending Engineer of the Rideau Canal, Canadian Building, Ottawa, on and after this date.

The Department does not bind itself to accept the lowest or any tender.

By order,
L. K. JONES.
Secretary.

Department of Railways and Canals,
Ottawa, 8th June, 1906.

Newspapers inserting this advertisement without authority from the department will not be paid for it.

TENDERS FOR WALKS

Sealed tenders will be received by the undersigned up to noon, FRIDAY, JULY 6TH, 1906, for the construction of Cement Walks required in the Village of Grand Valley for the year 1906.

Tenders to state price per square foot for sidewalks and crossings.

Specifications and further information may be had from the Clerk.

The lowest or any tender not necessarily accepted.

WM. McINTYRE, Clerk,
Grand Valley, Ont.

TENDERS FOR SHOE FACTORY

Sealed tenders for construction of Shoe Factory in Seaforth will be received by the undersigned up to noon, MONDAY, JULY 2ND, 1906, for each part of work according to plans and specifications, viz: No. 1, Brick and Cement work, or all cement; No. 2, Carpenter work. Plans and specifications may be seen at the store of Mr. W. H. Willis. Lowest or any tender not necessarily accepted.

The W. H. WILLIS SHOE CO.,
Seaforth, Ont.

Georgian Bay and Seaboard Railway

TENDERS

Tenders will be received by the undersigned up to noon on SATURDAY, JULY 7TH, for the grading, bridging, fencing, track laying, ballasting and other work required in connection with the construction of the above Railway from Victoria Harbor to a point connecting with the Canadian Pacific Railway between Peterborough and Havelock.

Plans and specifications can be examined at the office of the Division Engineer of Construction, 118 King street west, Toronto.

The lowest or any tender not necessarily accepted.

J. W. LEONARD, President,
Toronto, Ont.

Tenders Wanted

Sealed bids, marked "Tenders," will be received by the undersigned up to 5 P.M. TUESDAY, 3RD JULY, 1906, for the construction of the following works:

1. 140,000 sq. ft concrete sidewalk.
2. 26,000 feet water mains.
3. 22,000 feet main and lateral sewers.
4. 17,900 yards pavement on 10th, 11th, Broad, Rose and Hamilton streets.

Plans and specifications may be seen at the Engineer's office.

The lowest or any tender not necessarily accepted.

ANGUS SMITH,
City Engineer.

Regina, Sask., 7th June, 1906.

[FOR ADDITIONAL ADVERTISEMENTS FOR TENDERS SEE NEXT PAGE.]

TO CONTRACTORS

Tenders will be received at the office of the undersigned until MONDAY, JUNE 25TH, at 5 p.m., for the Furnitnre and Seating of the Goel T-Zedec Hebrew Synagogue, University avenue, Toronto. Lowest or any tender not necessarily accepted.

SYMONS & RAE, Architects,
15 Toronto St Toronto.

TO CONTRACTORS

Tenders will be received at the office of the undersigned until MONDAY, JUNE 25TH, at 5 p.m., for the various works required in the erection of Houses in St. Patrick and Beverley Streets, Toronto. Lowest or any tender not necessarily accepted.

SYMONS & RAE, Architects,
15 Toronto, St., Toronto.

TOWN OF OWEN SOUND
DEBENTURES

Sealed tenders, addressed to the undersigned, will be received up to 3 o'clock p.m. on FRIDAY, JULY 20TH, 1906, for the following Debentures:

$48,000—Twenty years, 4%, for Gas Plant;
$45,000—Twenty years, 4%, for Electric Light Plant;
$12,500—Twenty years, 4%, for Construction of Bridge;
$10,000—Ten years, 4%, for Collegiate Institute Building.

Tenders will be received for the whole or any part.

No tender necessarily accepted,

A. J. SPENCER,
Town Treasurer.

Owen Sound, June 14th, 1906.

Town of Fort William, Ont.

Proposals for Concrete Sewers, Cast Iron Pipes, Etc.

Sealed proposals will be received until the 5TH DAY OF JULY, 1906, for the construction of seven sewer outlets, including the supplying of all necessary Cast Iron Pipe, material, labor, etc., as follows:

1295 ft. of 3 ft. 6 in. and 665 ft. of 4 ft. Concrete Sewer;
904 ft. of 36 in. and 375 ft. of 30 in. Cast Iron Pipe

Plans and specifications may be seen, and form of tender obtained on application to H. S. Hancock, C.E., Town Engineer.

Proposals must be addressed to the undersigned and endorsed "Proposal for Trunk Sewer."

The lowest or any tender not necessarily accepted.

A. McNAUGHTON.
Town Clerk.

Dated at Fort William this 15th Day of June 1906

Tenders Wanted

Tenders will be received at my office until noon of SATURDAY, 30TH JUNE, 1906, for the following steel, pile and trestle rivet connected bridges:

Town Line of Dover East and West, length 90 feet.

Front of Seventh Con., about line lots 1 and 2, length 72 feet.

Front of Seventh Con., at Jacob's Road, length 63 feet.

Front of Fourteenth Con., at Rankin Creek, length 70 feet.

Each of above shall have 30 foot centre span, 16 foot roadway, 14 feet above creek bed, 3 inch pine planking. Alternative tenders for concrete abutments at shore ends, and also for reinforced concrete structures throughout will be considered, details of special constructions to be attached.

Plans and specifications, after Saturday, 16th inst. A satisfactory marked cheque for $100 in favor of Treasurer, Dover Township (to be held as a guarantee of good faith, until an approved contract for the work is executed and security for its completion furnished) to accompany each tender, and to be forfeited to the Township in case of failure on part of contractor to enter into satisfactory written contract when notified to do so. The lowest or any tender not necessarily accepted. Address,

J. W. SHACKLETON, C.E.,
Chatham, Ont.

Tenders Wanted

Tenders for the whole or the various trades will be received by the undersigned up to JUNE 25TH, 1906, for erecting and completing a Public School in the Town of Penetanguishene.

Specifications may be seen at offices of the architect, Mr. Thomas Kennedy, Barrie, or at office of Dr. McDonald, Peretanguishene.

W. R. PARKER,
Secretary Public School.

Penetanguishene, June 16th, 1906

Town of Carman
WELL DRILLING

Sealed tenders will be received by the Secretary-Treasurer until 6 p.m. MONDAY, JUNE 25TH, 1906, for the Drilling of a Well or Wells for the water supply in the Town of Carman.

Specifications and form of tender may be obtained from the undersigned.

No tender necessarily accepted.

CECIL GODDARD, C.E.,
6 Roslyn Road, Winnipeg.

A. MALCOLMSON,
Secretary-Treasurer, Carman.

NOTICE TO CONTRACTORS

Tenders will be received by the undersigned up to 12 o'clock noon of SATURDAY, JUNE 30TH, 1906, for the construction of a

Steel Concrete Bridge

at Aultsville, Ont. (estimated cost $2,700).

Plans and specifications may be seen at the office of the Reeve, W. J. Ransom, Dickinson's Landing, Ont., or with the engineer, W. H. Magwood, C. E., Cornwall, Ont.

The lowest or any tender not necessarily accepted.

H. E. HODGINS, Clerk,
Osnabruck Centre, Ont.

Dated at Osnabruck this 13th day of June, 1906.

CONTRACTS OPEN.

MINIOTA, MAN. — A by-law has been carried to raise $4,000 for erection of new school.

WEYBURN, SASK.—Tenders have been taken for erection of a school house in Lillie Glen District.

NANAIMO, B.C.—E. H. Bird will receive tenders up to June 23rd for erection of St. Paul's church.

OAKVILLE, ONT. — The Town Council are considering the installation of a water-works system.

KEMPTVILLE, ONT.—The Town Council are preparing for the erection of the new library building.

KINGSTON, ONT.—A new hotel is to be built on the site of the British American, cost $125,000.

KAMLOOPS, B.C. — Tenders have been taken for the erection of the new school for St. Ann's Convent.

MEDICINE HAT, ALTA. — Cousins & Flatt have sold a site in Rosedale for a brewery to cost $75,000.

SACKVILLE, N.B.—It is said the Minister of Railways intends having a new station built here this season.

ODELL, ONT.—G. Riddell will receive tenders up to June 22nd for $3,381 five per cent. drainage debentures.

AMHERST, N.S.—Mrs. Geo. Hewson has had plans for a house, prepared by H. E. Gates, architect, Halifax.

WINDSOR, N.S. — H. E. Gates, architect, Halifax. has prepared plans for a residence for H. W. Sangster.

PORTAGE LA PRAIRIE, MAN.—J. Duncan, architect, will prepare plans for necessary repairs to school buildings.

SEAFORTH, ONT. — The W. H. Willis Shoe Co. will receive tenders up to July 2nd for erection of a shoe factory.

PARIS, ONT.—Tenders have been taken by T. McCosh, Town Clerk, for construction of granolithic walks in the town.

NEW GLASGOW, N.S. — H. E. Gates, architect, Halifax, has prepared plans for a house for W. D. Chisholm.

MONT JOLI, QUE.—The Mont Joli Water Co. propose installing waterworks and sewer systems in the village to cost $50,000.

ST. CATHARINES, ONT. — Tenders have been taken for erection of an addition to building of St. Catharines Lamp Co.

BARRIE, ONT. — Thos. Kennedy, architect, has taken tenders for erection of a residence on Clapperton street for J. F. Wilson.

DEER PARK, ONT.—The Cannon Granite Company intend erecting a large factory, corner Pleasant avenue and Yonge street.

DALHOUSIE, N.B.—W. Chipman, C.E., Toronto, has reported on the cost of a pumping system for the town, cost about $45,000.

LEAMINGTON, ONT.—A. Baird, C.E., will receive tenders up to June 25th for construction of Beetham drain in Malden township.

NIAGARA FALLS, ONT. — J. Robinson, Town Clerk, will receive tenders up to June 25th for $81,592.60 4½ per cent. local improvement debentures.

MONCTON, N.B. — L. K. Jones, Department of Railways and Canals, Ottawa, will receive tenders up to July 3rd for erection of a planing mill in I.C.R. yards.

DARTMOUTH, N.S.—H. E. Gates, architect, Halifax, has prepared plans for additions to premises of T. C. Allen & Co. and for new station for Dartmouth Ferry Commission.

CRANBROOK, B.C.—A new library is to be built, cost $15,000.—Street improvements and sidewalks will be made cost $10,000.—An additional storey will be built to the firehall.

GODERICH, ONT.—P.A. Peterson, Chief Engineer, will receive tenders up to June 27th for construction of seventeen miles of the Guelph & Goderich Railway, from Linwood to Listowel. Plans at the Engineer's office.

TARA, ONT.—H.T. Potts, Township Clerk, will receive tenders up to June 25th for construction of Griffin-Coleman drain in Arran township. Plans with C. E. Start.

MIDLAND, ONT.—T. I. Trueman, Town Clerk, will receive tenders up to June 26th for purchase of $20,900 sewerage and $5,000 High school extension 4½ per cent. debentures.

PETROLEA, ONT. — H. Branston will receive tenders up to June 28th for erection of a stone and brick school building. Plans with above named and with H. C. McBride, architect, London.

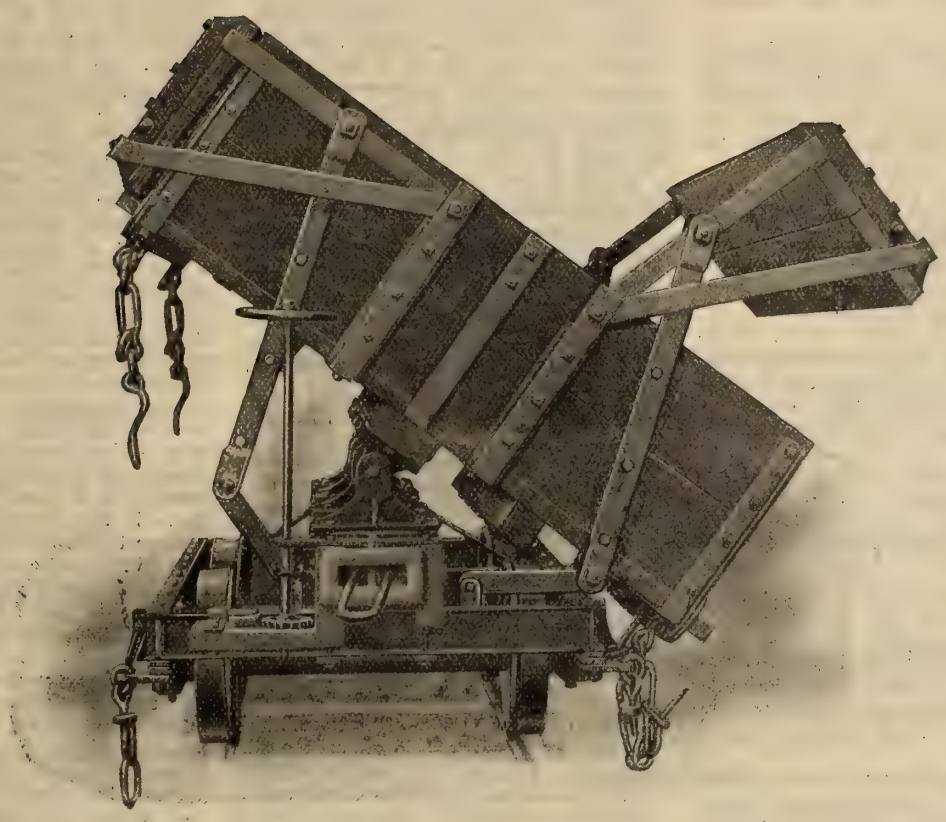
ST. MARY'S ONT.—The notice calling for erection of a post office building here has been cancelled.—J. A. Humphries, architect, has prepared plans for addition to Collegiate Institute, cost $3,335.

SPEEDSIDE, ONT. — J. Grieve, Reeve, will receive tenders up to June 25th for construction of a wooden bridge and a concrete culvert in Eramosa township. Plans with township clerk, Rockwood.

LETHBRIDGE, ALTA.—The C. P. R. have decided to build a steel bridge here, cost about $1,000,000.—The Board of Trade will petition the Dominion Parliament to have a new post office built here.

SASKATOON, SASK.—The Cockshutt Plow Co., Brantford, Ont., have purchased a site on A avenue for a ware-

RAILROAD CONTRACTORS' EQUIPMENT



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house.—Sutherland, Engen & Hanson, piano dealers, intend building an office and warehouse here.

SHEDIAC, N. B. — D. Pottinger, Railway office, Moncton, will receive tenders up to June 27th for construction of a station building. Plans with Chief Engineer, Moncton, and with Station Master here.

MOOSE JAW, SASK. — The Fire Water and Light Committee will ask the City Enginneer to prepare plans for new firehall.—Jones & Bunyard, architects, have taken tenders for erection of an Exhibition Pavilion.

SUSSEX, N.B. — C. H. LaBillois, Department Public Works, Fredericton, will receive tenders up to July 2nd for rebuilding Armstrong's Bridge, King's county. Plans at the Department and with O. P. King, M.P.P.

NORTH BAY, ONT.—F. Gelinas, Department of Public Works, Ottawa, will receive tenders up to July 9th for construction of a public building. Plans at the Department and with the postmaster here.

WELLAND, ONT.—J. H. Crow will receive tenders up to June 28th for concrete walks on First street and Plymouth avenue. — The Royal Commission on transportation have recommended the enlargement of Welland canal.

STRATFORD, ONT.—H.L. Merritt, Blenheim, will erect a cooperage factory here.—W. J. Ireland and Orr & Russel have been appointed joint architects to prepare plans for new church for Knox congregation, cost $15,000.

AULTSVILLE, ONT.—H. E. Hodgins, Osnabruck Centre, will receive tenders up to June 30th for construction of a steel-concrete bridge. Plans with W. J. Ransom, Dickinson's Landing, and W. H. Magwood, C. E., Cornwall.

STRATHCONA, ALTA. — Plans have been prepared by W. H. Martin & Co., Toronto, for church building for Holy Trinity Parish, cost $8,000.—The Trustees of the R. C. school are considering the erection of a new school.

PRINCE ALBERT, SASK.—J. H. G. Russell, architect, Winnipeg, has prepared plans for St. Pauls Presbyterian church, cost $25,000.—The Dominion Government is being ask to aid in building a new railroad bridge to cost $165,000.

CAPE COVE, QUE. — F. Gelinas, Department of Public Works, Ottawa, will receive tenders up to July 10th for construction of a pier. Plans with P. Beland, Post Office Building, Quebec, C. Desjardins, Post Office Building, Montreal, and Postmaster here.

HALIFAX, N.S.—H. E. Gates, architect, has prepared plans for additions to the Union Bank building, Nova Scotia Hospital and Victoria General Hospital, also for a residence on Tobin street for A. W. Duffin.—The Dominion Government have included in their estimates the extension of North street station also construction of an elevator.

BRANDON, MAN.—Plans have been prepared for the new G. N. R. station, on Twelfth street, Bedford stone and pressed brick, cost $30,000.—G. Wyman intends building a residence on Eighth street, cost $5,000.—Tenders have been called for erection of a two story brick block for Brandon Machine Works.

QUEBEC, QUE.—Building permits have been issued as follows: Ls. Lanose, repairs to the Caisse d'Economie building, corner Mountain Hill and Peter street, cost $15,000; W. McWilliam, for repairs to the building, corner Garneau and Fabrique streets, for Bank of Montreal, cost $3,000.

NEW WESTMINSTER, B.C.—The Calgary Milling Co. are seeking a site for a mill and elevator.—It is said that American capitalists purpose building a seven-storey summer hotel in the city.—R. Lennie will receive tenders up to June 21st for erection of a wing to Central school.

PETERBORO, ONT.—The Peterboro Show Case Co., intend building a two-storey factory.—The revised plans of Mr. Blackwell, architect, for the Isolation hospital have been presented to the Board of Health, cost $8,500.—The plans for the new armouries have been approved by the officers of 57th Regiment, brick and stone, 254½ x 170 feet, cost $100,000.

EDMONTON, ALTA. — Miss Le Page will build a residence on Sixth street, cost $3,000.—A. H. Magoon, architect, is preparing plans for a large warehouse on Third street for Telfer Bros., Colingwood, Ont., and A. McDonald Co., cost $40,000.—The plans for the Isolation hospital have been approved by Northern Alberta Medical Association.

FORT WILLIAM, ONT. — D. F. Burke, will extend his block, being built corner Cumberland and Ambrose streets.—White, Sons & Co., London, are considering the erection of a factory for making threshing machinery. — The Council and Board of Health propose establishing an incineratory to cost about $20,000.

PORT ARTHUR, ONT.—The C. P. R. have taken tenders for erection of a new station here.—The Twin Town Agricultural Society have asked the Councils of Fort William and of this town to guarantee $15,000 bonds for new buildings, etc., for exhibition grounds.—A by-law will be voted on July 17th to grant a bonus to the Seamen, Kent Co. to establish a branch here.

VANCOUVER, B.C.—H. G. Bissett, proprietor of Mining Exchange Saloon, is having plans prepared for addition to the building. E. Guenther, architect.—The Y.M.C.A. directors are considering the enlargement of their building, cost $5,000.—J. A. L. Waddell, Kansas City, is preparing estimates for bridges over False creek at Westminster ave., Gamble and Granville streets.—The A. R. Williams Co., of Toronto, are looking for a site here to establish a branch of their business.

HAMILTON, ONT.—It is stated that the Bennett Theatrical Co. expect to soon begin the erection of a new theatre in this city.—Stewart & Witton, architects, have taken tenders for the erection of a carpet factory, cost about $10,000.—F. J. Rastrick & Sons, architects, have taken tenders for erection of a cement dwelling on South street.—W. A. Edwards, architect, is preparing plans for brick Sunday School building for Barton street Methodist church, cost about $12,000. The same architect has taken tenders for a residence on Homewood avenue for S. S. Washington.—S. McPhie, architect, is preparing plans for residence for R. Moody, in East Hamilton.—The Wentworth County Council are considering the erection of a House of Refuge.—The fire, water and light committee will ask that a by-law be voted on to grant $100,000 for a fire station and for equipments for the central stations.

MONTREAL, QUE.—L. O. David, City Clerk, will receive tenders up to June 22nd for steam hammer, No. 4 wood lathe, Oster improved pipe threading and cutting machine, adjustable stroke crank shaper, drilling machine.—The City Clerk has taken tenders for construction of sewers on Hogan, Montgomery, De Levis, Wurtele, Hochelaga and Davidson streets.—J. Sawyer, architect, will prepare plans for two school buildings on Chaboillz square. — The property, corner St. Catharine and City Councillor streets has been sold by J. Stevenson, Brown & Co., which it is said will be converted into stores.—Building permits have been issued as follows: Catholic School Commissioners, four-storey brick school, corner Richmond and Grand Trunk streets, cost $25,000; Dominion Textile Co., seven-storey factory, St. Ambroise street, cost $50,000; Smart Bag Co., three-storey factory, Mullins street; J. A. Roch, dwellings 291 St. Antoine street, cost $10,000; X. Charbonneau, dwelling, St. Catharines street cost $5,500; W. A. Kneeland, 285 Charlevoix street, three dwellings, $12,000; Canada Sugar Refining Co., alterations, $4,000; J. B. Collette, four dwellings, Chateguay street, $3,000.

WINNIPEG, MAN.—Tenders have been taken this week for construction of a number of granolithic walks, sewers, macadam, block and asphalt pavements.—Board of Police Commissioners will receive tenders up to June 26th for erection of police station.—V. W. Horwood, architect, has taken tenders for erection of a house at Crescentwood, for A. E. Kingdon.—J. D. Atchison, architect, is preparing plans for a five story brick block on Portage avenue for Kennedy & Vokes, cost $75,000.—The same architect has prepared plans for an addition to building of Modern Laundry on Hargrave street, cost $20,000. — Oldfield, Kirby & Gardiner are considering erection of a ten story office building, corner Main street and Portage avenue.—A. & W. Melville, architects, are preparing plans for a private hospital in Fort Rouge.—Plans have been prepared for the artificial lake at mouth of Sturgeon creek, cost about $25,000.—St. Giles' Presbyterian church purpose erecting a new building on Burrows ave.—The Kildonan council have decided to have estimates prepared for piers and approaches for bridge at the old Kildonan ferry.—Plans have been prepared for a three story apartment block on Kennedy street for J. H. Lee, Neepawa, cost $20,000.—F. W. Heubach has had plans prepared for a residence on Roslyn road.—C. W. Fillmore will build a residence on Cumberland street, cost $10,000.—Canada Malting Co. will have a new elevator erected on Lincoln street, cost $12,000.—Mrs. H. S. Dick will build a three story apartment block on Edmonton street, cost $50,000.—C. Plaxton will build a block on Donald street, cost $20,000.—Plans have been prepared for branch office for Bank of Commerce, corner Blake street and Logan avenue, cost $5,000.—W. Moxam will erect five houses on Maryland street, cost $27,000.—S. E. Elliott has had plans prepared for store and dwelling on Main street, cost $5,000. — The Winnipeg Theatre Co. purpose re-constructing the Winnipeg theatre. Stevens & Patterson, architects, are preparing plans.

TORONTO, ONT.— The Board of Control will receive tenders up to June 26th for supply of steel bolts, nuts, etc., for high pressure fire system.—G. W. Gouinlock, architect, J. Milne, structural engineer, Hamilton, and S. R. Heakes, government architect, have been employed to report on alterations to parliament buildings. — Work will soon begin on construction of a new military storehouse, cost $100,000.—J. Poucher, Broadview and Sparkhall avenues is asking tenders for plumbing, painting and plastering of three houses.—Tenders are being received at 29 Tranby avenue, for erection of a pair of houses.— The Board of Control are seeking a site for Riverdale branch library. — It is said that the Swedenborgian church purpose erecting a parsonage, corner College street and Euclid avenue.—E. E. Sheppard intends erecting eleven 2-storey cottage flats, corner Charles and Jarvis streets.—The Board of Control have voted $201,000 for enlargement of the public schools.—

Tenders for building three houses are invited at 92 Winchester street.—Tenders are wanted at 7 Lakeview avenue for building three solid brick houses.—It is said the new Globe buildings will be located on north-west corner Bay and Adelaide streets.—The City Engineer has recommended asphalt pavement on Pape avenue, cost $26,602; on Christie street, cost $22,156; on St. George street, cost $18,136; brick pavement on Royce avenue, cost $23,090; macadam on Winchester, cost $20,830 and many others.—R. Lankin has purchased a lot on Pape avenue on which he will erect a residence.—Building permits have been issued as follows:—Geo. Rathbone, 2-storey brick office, 10 Northcote avenue, cost $3,000; David McMillan, 2-storey and attic brick dwelling, 64-66 Lewis street, cost $3,000; S. Capithorn, 2½-storey brick dwelling, Forest Hill road, cost $4,000; A. A. Barthelemes, 2-storey and brick and stone detached dwelling, Palmerston boulevard, near Harboard street, cost $5,000; Mary A. Walker, pair 2½-storey brick dwelling Walker avenue, cost $5,500; S. E. Booth, 2-storey brick dwelling, Balmoral avenue, cost $3,000; C. Coultea, pair 2-storey and attic dwellings, Grace street, cost $4,000; F. W. Douse, 2-storey brick dwelling, Dufferin street, near Bloor, cost $2,800; Mrs. E. Cordell, 2-storey brick veneered and R. S. dwelling, 33 Thomps n street, cost $3,000; Riverdale Club Ltd., 2-storey brick club house, Broadview avenue, near Queen street, cost $8,000; A. T. Gregory, alteration to store and dwelling, Close avenue, cost $10,000; Cosgrave Brewery Co., 4-storey brick and stone hotel, Teraulay street, near Queen, cost $23,000; General Distillery Co., 1-storey brick and stone storehouse, Trinity street cost $11,000; C. W. Rous, 2-storey and attic brick and stone dwelling, St. George street, near Dupont, cost $3,800; Mrs. Jas. Tierney, 2-storey and attic roughcast dwelling, brick front, Sumach street, near Sydenham, cost $2,200; W. J. White, three 2-storey brick and stone dwellings, Garden avenue, cost $6,000; J. A. Dell, 2-storey roughcast dwelling, Withrow avenue, near Pape, cost $2,100; C. N. Mark, 2-storey and attic brick veneer dwelling, Emerson avenue, cost $2,800; King Bros., pair 2-storey and attic brick and stone dwellings, Camden street, cost $4,000; W. Schulkins and F. Park, pair 2-storey brick and stone stores and dwellings, College street, near Dovercourt road, cost $6,000; L. E. Manhard, 1½-storey stone and brick dwelling, Gladstone ave., cost $2,000; W. T. Izzard, 2-storey brick and stone dwelling, Boustead ave., cost $3,200; G. A. Wickens, two 2-storey brick dwellings, Dunn ave., cost $5,000; G. S. Minty, 2½-storey stone and brick dwelling, Kendall ave., cost $3,800; W. Hiltz, four 2½-storey brick dwellings, 661 Broadview ave., cost $9,000; J. W. Walker, four 2-storey and attic brick and stone dwellings, Corncord ave., cost $10,000; C. W. Chadwick, two 2-storey brick dwellings, Jameson ave., cost $5,-

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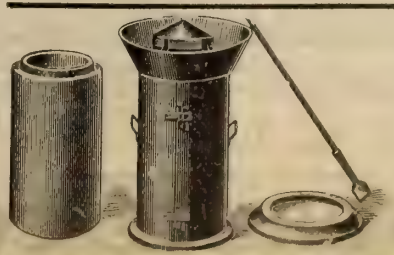
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Climax Road Machine Co., 64 King East, HAMILTON, CANADA

000; A. W. Draper, 3-storey brick and stone apartment house, corner Sherbourne street and Wilton ave., cost $30,000; A. E. Semple, 2-storey brick and stone dwelling, Grace street, cost $3,200; Sexton & Co., 3-storey and basement brick and stone factory, 88-90 Terauley street, cost $20,000; E. C. Tuckett, 1-storey brick and stone dwelling, Sinclair ave., cost $2,800; Jas. Jasper, 2-storey and attic brick dwelling, 76 Simpson ave., cost $2,500; J. Stevens, 2-storey brick dwelling, 157 Macdonnell ave., cost $2,500; Mr. Turano, pair 2-storey and attic brick dwellings, Manning ave., near Harbord street, cost $5,000.

CONTRACTS AWARDED.

SHEHO, ALTA.—$1,000 village debentures: Addison Reid, Regina, purchaser.

KISBY, SASK.—$2,500 six per cent. school debentures: J. W. Nay, Regina, purchaser.

NORTH BAY, ONT.—Construction of St. Pierre block: Marcelles & Lamothe, contractors.

HALIFAX, N.S.—Erection of Administralion building: W. Lownds, contractor, cost $4,125.

PICTON, ONT. — $10,000 four per cent debentures: Wood, Gundy & Co., purchasers.

PERTH, ONT.—Construction of cement sidewalks: Clement & Leal, Marmora, contractors.

PRINCE ALBERT, SASK.—Erection of Presbyterian church: W. J. Wright, contractor, $24,720.

MACLEOD, ALTA. — Erection of stores for Hudson Bay Co.: MacLachlan & Lambert, contractors.

PONOKA, ALTA.—$7,500 5 per cent.

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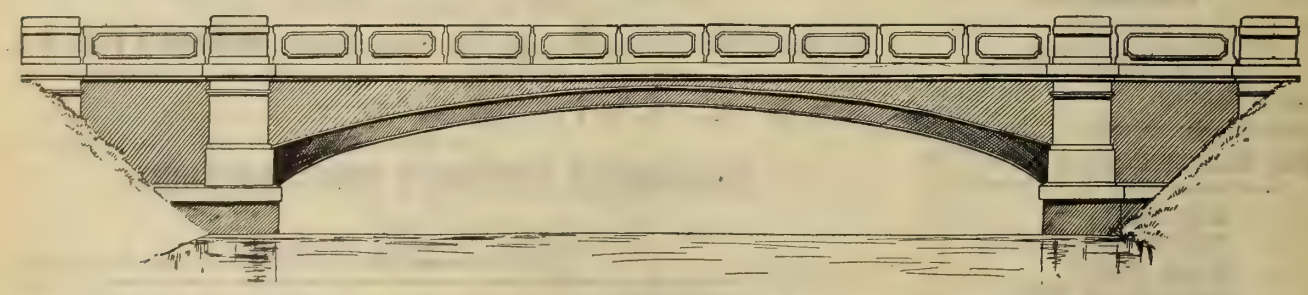

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BROCKVILLE, ONT.—21 h.p. suction gas producing plant for W.H. Cornstock: Canadian Fairbanks Co., Montreal, contractors.

FORT WILLIAM, ONT.—Construction of Section one of Loch Lomond water supply system: W. Newman, C.E., Regina, contractor, cost $97,000.

BLENHEIM, ONT.—Construction of sidewalks and crossings in town: Forest City Paving Co., London, successful tenderers, at 10 2/5 cents per foot.

ORILLIA, ONT.—Alterations to store in Kean Block for Parsons Co.: Thornbury Planing Mill Co., contractors, $2,500. T. Kennedy, Barrie, architect.

BRANDON, MAN.—Brandon & Southwestern Railway construction: John Bradley, contractor.—Alexandria school building: C. W. Hall, contractor, $24,-750.

BRANTFORD, ONT. — Addition to Huron street school: J. Bartle, successful tenderer for $12,200.—Central office for Bell Telephone Co.: Schultz Bros., contractors.

STRATHCONA, ALTA. — Residence on Main street for R. B. Douglas: Pheasy & Batson, contractors, cost about $4,000. —Construction of sidewalks: Berger & Roberts, contractors, at 23½ cents per foot.

VANCOUVER, B. C.—Additions to Eagle Hotel on Cordova street: T. McKinnon, contractor. Dalton & Eveleigh, architects. — Foundations of P. Burns abattoir: Armstrong and Morrison, contractors.

KENORA, ONT—Equipment of new power station: Generators, switch-boards, and exciters, Allis-Chalmers-Bullock Co., Montreal, $41,600; Turbines and appliances, $25,715, and man-hole rings, valves, gate lifts, etc., $6,628, Wm. Hamilton Manufacturing Co., Peterboro.

ST. MARY'S, ONT.—Supply of 500 barrels of Blue Lake cement: O'Brien Bros., successful tenderers, at $1.96¼ per barrel.—Building of Water street and James street culverts: James Clyde, contractor.

WINNIPEG, MAN.—$206,000 Province of Manitoba debentures: Union Bank of Canada, purchasers at 101⅛.—Residence on Wellington Crescent for G. W. Erb: Masonry, W. Horner; other work, James & James. H. B. Rugh, architect.—Theatre building, corner Smith street and Ellice avenue: Masonry and steel work, Canadian White Co. H. C. Stone, archi-

(Continued on page 14.)

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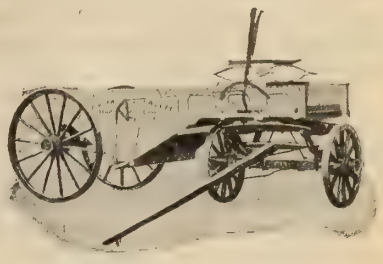

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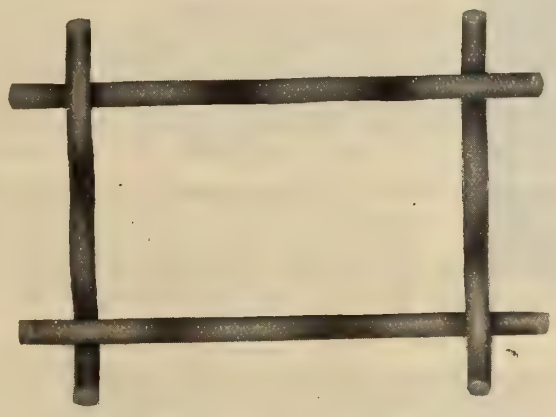

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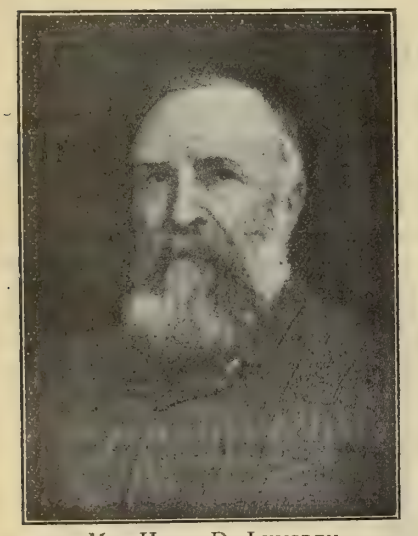
Mr. Lumsden was born in Aberdeenshire, Scotland, on September 17, 1844, and came to Canada in 1861. He served an apprentice ship as a land surveyor at Woodville, Ont., until 1864 and was engaged in private practice until 1870. A long line of engagements on Canadian railway surveys, interspersed later on by construction work, was begun by Mr. Lumsden in 1870, the roads with which he was connected being the Toronto and Nipissing Railway, Toronto, Grey and Bruce Railway, Northern Railway, Credit Valley Railway and Canadian Pacific Railway. In March, 1881, he became chief engineer of the Ontario and Quebec Railway, which position he held until November, 1884. Then for practically ten years he was in charge of the location and construction of various works for the Canadian Pacific Railway, including several lines in the north-west. The Eastern section of the Transcontinental Railway for which he is now acting as chief engineer will extend from Moncton, N. B., to Winnipeg, Man., a distance of some 1,890 miles.



MR. HUGH D. LUMSDEN,
President Canadian Society of Civil Engineers.

Mr. Lumsden was elected a member of the Institution of Civil Engineers in 1885 and of the Canadian Society of Civil Engineers in 1887.

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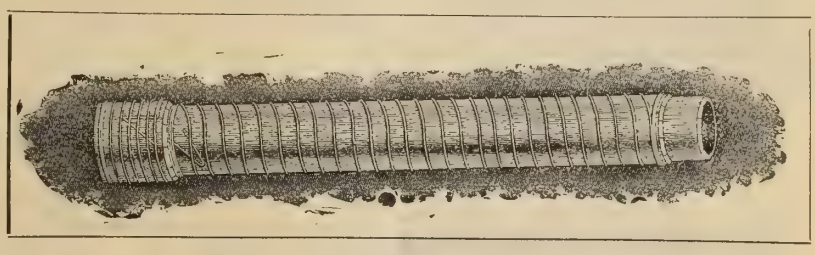

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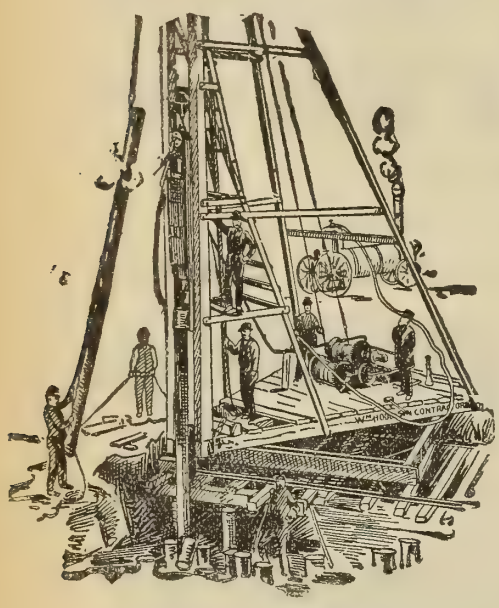

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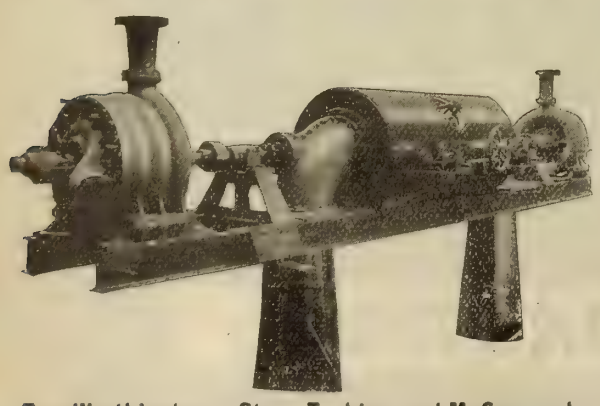

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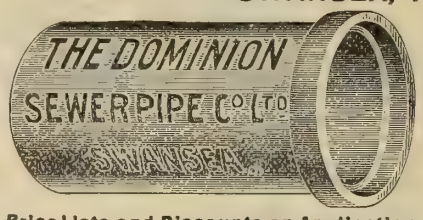

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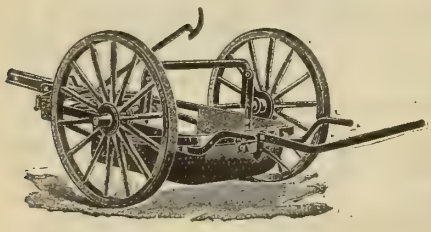

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							Neat.					3 (Sand) to 1 (Cement)				
					Initial	Final	1 dy.	7 dys	28 dys.	3 mos	1 yr.	1 dy.	7 dys	28 dys	3 mos	1 yr.
1903	20	O.K.	3.135	2.1	162	345	307	701	783	827	*	74	214	299	367	*
1904	44	O.K.	3.150	2.0	132	342	300	744	848	914	938	86	262	354	401	427

* Tests for 1 year were not completed when records closed. 1905 report not yet issued.

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NOTES.

Archibald & Shea, Winnipeg, Man., who have been in business as plumbers for some time past, have now bought out the business of J. C. Orr & Co., on William avenue, and will largely increase their operations.

The Dominion Office & Store Fittings Company, London, Ont., are erecting a new factory on Dundas street two blocks east of the Fair grounds. Ths factory will be a 2-story building and equipped in the most modern fashion, slow burning mill construction throughout. The first story is almost completed and the company expect the factory to be running by the first of October. The company are devoting themselves specially to interior fittings and with the increased facilities the new factory will afford, they expect to do one of the largest trades in this line in the Dominion.

Contracts have been closed and work is now under way on what will be the most notable series of reinforced concrete buildings in Montreal. The American Tobacco Company, Limited, for whom the factories are being erected, demanded speed in construction and selected as the builders the Dominion Engineering and Construction Company, Limited, of Montreal. All the work is being done on the Gilbreth System and the cost-plus-a-fixed-sum contract. The architects, Messrs. Findlay & McGregor, declare that the plant when completed will be a model of its kind in Canada. The plans call for many novel effects and also for the completion of the whole in five months.

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tect.—New grain exchange building corner of Lombard and Rorie streets: Kelly Bros. & Mitchell, contractors, cost $452,885. Darling & Pearson, architects. —Firehall building in ward 7: John Saul, contractor, cost $16,220.

MOOSE JAW, SASK. — Laying of granolithic walks in town: Pettypiece Silex Stone Co., Amherstburg, Ont.—Construction of Methodist church: John Toye, Winnipeg, contractor, cost $62,000. J. Chisholm, architect. — Construction of sewer and water mains: Fry & Masterson, contractors, cost $7,464.

TORONTO, ONT.—New Alexandria Theatre, King street: T. W. Horne and McKeown & Co., of Chicago. J.M. Lyle and Crerar & Hastings, New York, architects.—Pumping machinery for Woodbine sewage system: Allis-Chalmers-Bullock, Limited, $3,185.—Masonic Temple building at Balmy Beach: Carpentry, F. Armstrong; concrete work, A. Johnston. C. F. Wagner, architect.—The construction of brick work for Kew Beach presbyterian church has been re-let. W. Forbes & Son, contractors.—Two residences on Victoria ave., for W. I. Whaley: Love Bros., contractors. — Construction of pavements: Asphalt — Jarvis street, from Queen to Bloor, Construction and Paving Co., $30,875; Adelaide street, from Bay to York, Construction and Paving Co., $7,828. Brick—Wellington street, from Bathurst to 314 feet 5 inches east, J. H. McKnight, $1,783. Macadam—Wellesley street, from Sumach to 243 feet east, City Engineer, $868.

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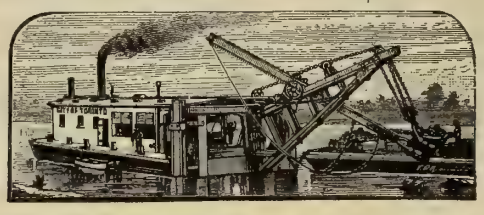

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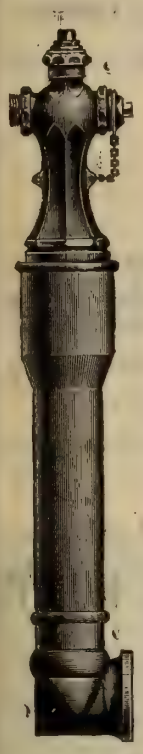

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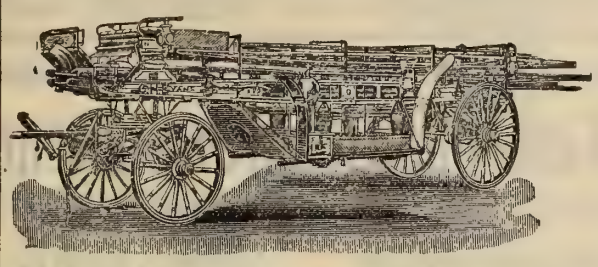

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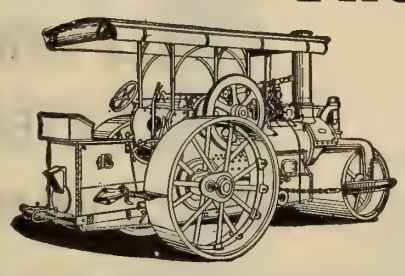

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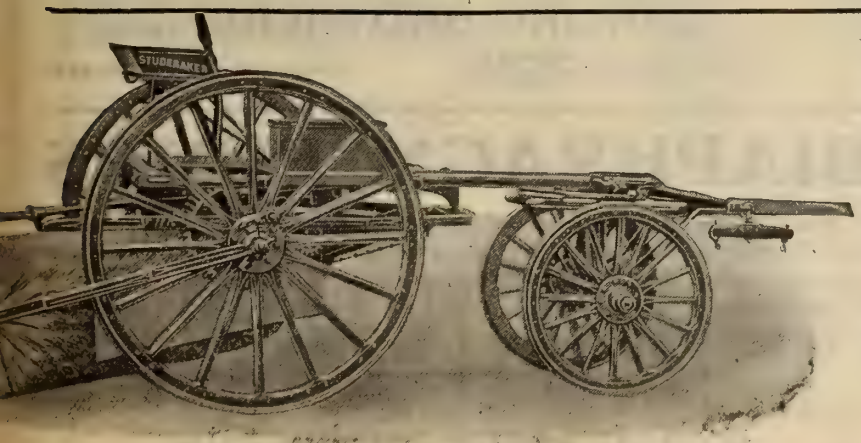

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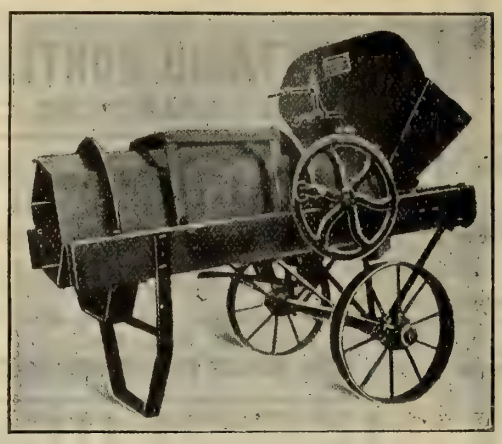

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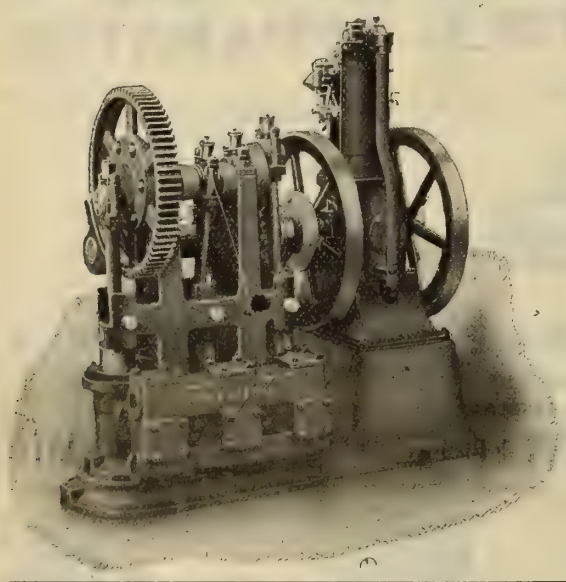

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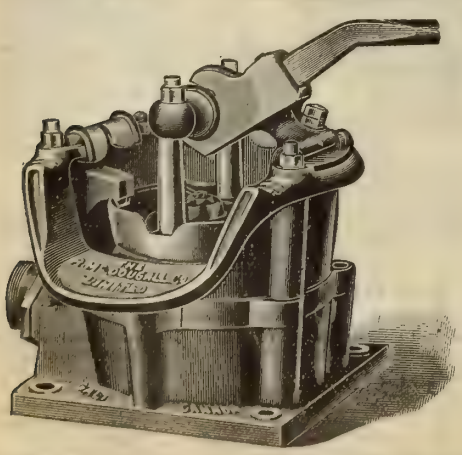

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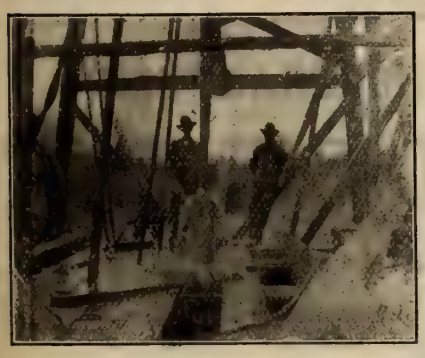

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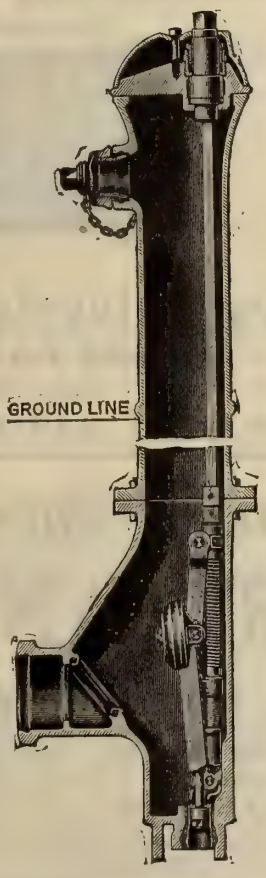

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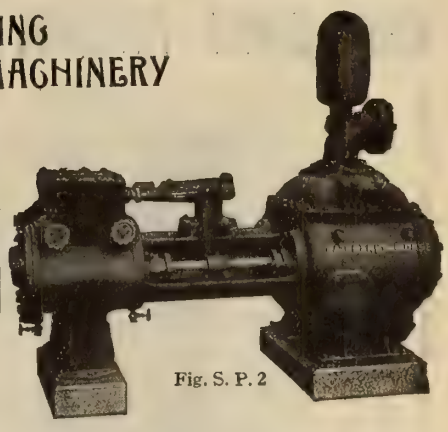

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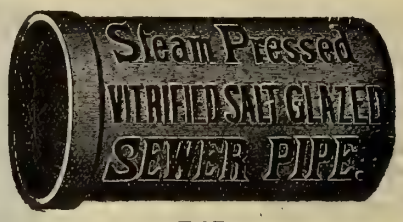

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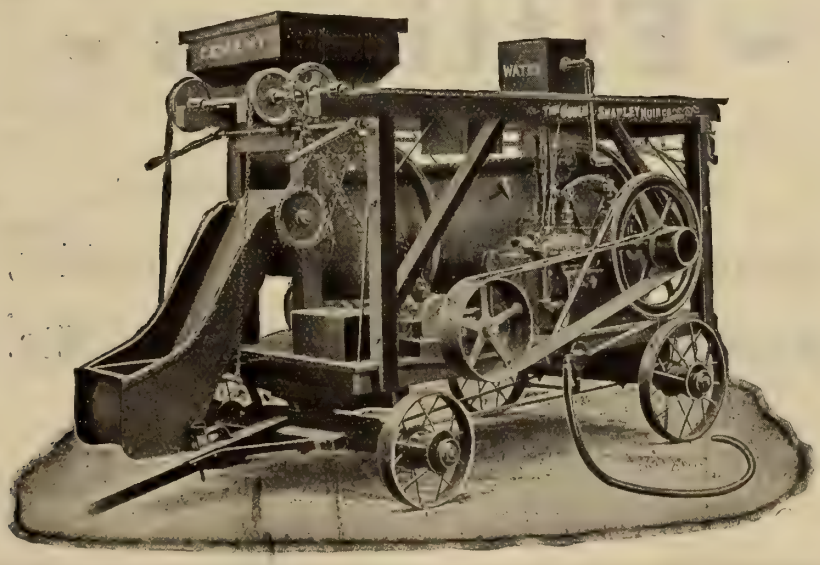

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J. KELSO HUNTER,
City Clerk.

Regina, 22nd May, 1906.

CITY OF BRANDON.

TENDERS FOR

STEEL BRIDGE

Sealed tenders will be received by the City of Brandon for the construction of a Steel Bridge for highway and electric railway traffic across the Assiniboine river on 18th Street.

The bridge will consist of two 105 feet spans on concrete piers.

Tenders will be received until 6 o'clock p. m. of FRIDAY, JULY 13, 1906.

A certified cheque on some chartered Bank of Canada, or cash deposit, equal to 5 per cent. of the amount of the tender, must accompany each tender as security for entering into a contract and for carrying out the contract.

Tenderers must submit plans and specification with tender. Plans of piers and all necessary information for tendering may be obtained on application to the undersigned or at the office of THE CONTRACT RECORD, Toronto. The City council does not bind itself to accept the lowest or any tender.

W. H. SHILLINGLAW,
City Engineer

Brandon, Manitoba, Canada, June 5. 1906,

TENDERS

will be received by the undersigned up to SATURDAY, JUNE 30TH, 1906, for the purchase of $10,000 Public School Debentures of the Town of North Bay, payable in 30 equal annual instalments, and bearing interest at .04½ per cent. per annum.

M. W. FLANNERY,
Town Clerk,
North Bay, Ont.

Tenders Wanted

Tenders will be received, addressed to the Township Clerk, up to SATURDAY, JULY 14TH, 1906, for the "Cleaning Out and Improvement of the West Flamboro Drain," in the County of Wentworth

Length of drain, about 24,000 lineal feet. Plans and specifications may be seen and forms of tender obtained from the office of the Clerk, or at the office of the township engineers, Messrs. Tyrrell & Mackay, Hamilton, Ont.

The lowest or any tender not necessarily accepted.

IRA N BINKLEY,
Township Clerk.

Box 42 Greensville, Ontario, June 18th, 1906.

TOWN OF OWEN SOUND

DEBENTURES

Sealed tenders, addressed to the undersigned, will be received up to 3 o'clock p.m. on FRIDAY, JULY 20TH, 1906, for the following Debentures:

$45,000—Twenty years, 4%, for Gas Plant;
$45,000—Twenty years, 4%, for Electric Light Plant;
$12,500—Twenty years, 4%, for Construction of Bridge;
$10,000—Ten years, 4%, for Collegiate Institute Building.

Tenders will be received for the whole or any part.

No tender necessarily accepted,

A. J. SPENCER,
Town Treasurer.

Owen Sound, June 14th, 1906.

Tenders Wanted

Tenders will be received at my office until noon of SATURDAY, 30TH JUNE, 1906, for the following steel, pile and trestle rivet connected bridges:

Town Line of Dover East and West, length 90 feet.

Front of Seventh Con., about line lots 1 and 2, length 72 feet

Front of Seventh Con., at Jacob's Road, length 63 feet

Front of Fourteenth Con., at Rankin Creek, length 70 feet

Each of above shall have 30 foot centre span, 16 foot roadway, 14 feet above creek bed, 3 inch pine planking. Alternative tenders for concrete abutments at shore ends, and also for reinforced concrete structures throughout will be considered, details of special constructions to be attached

Plans and specifications, after Saturday, 16th inst. A satisfactory marked cheque for $100 in favor of Treasurer, Dover Township (to be held as a guarantee of good faith, until an approved contract for the work is executed and security for its completion furnished) to accompany each tender, and to be forfeited to the Township in case of failure on part of contractor to enter into satisfactory written contract when notified to do so. The lowest or any tender not necessarily accepted. Address,

J. W. SHACKLETON, C.E.,
Chatham, Ont.

TENDERS FOR SHOE FACTORY

Sealed tenders for construction of Shoe Factory in Seaforth will be received by the undersigned up to noon, MONDAY, JULY 2ND, 1906, for each part of work according to plans and specifications, viz: No. 1, Brick and Cement work, or all cement; No. 2, Carpenter work. Plans and specifications may be seen at the store of Mr. W. H. Willis. Lowest or any tender not necessarily accepted.

The W. H. WILLIS SHOE CO.,
Seaforth, Ont.

Georgian Bay and Seaboard Railway

TENDERS

Tenders will be received by the undersigned up to noon on SATURDAY, JULY 7TH, for the grading, bridging, fencing, track laying, ballasting and other work required in connection with the construction of the above Railway from Victoria Harbor to a point connecting with the Canadian Pacific Railway between Peterborough and Havelock.

Plans and specifications can be examined at the office of the Division Engineer of Construction, 118 King street west, Toronto.

The lowest or any tender not necessarily accepted.

J. W. LEONARD, President,
Toronto, Ont.

THE BOARD OF EDUCATION

Tenders Wanted

Sealed tenders, addressed to the Secretary-Treasurer of the Board, will be received until

Tuesday, July 3rd, 1906

for the several works required for the enlargement of the following schools, viz:

BROCK AVENUE
PALMERSTON AVENUE
DOVERCOURT

— ALSO FOR —

Repairs, Alterations and Improvements at all the Schools

Specifications may be seen and all information obtained at the offices of the Board, City Hall. Each tender must be accompanied by the deposit mentioned in the said specifications and forms of tender. The lowest or any tender will not necessarily be accepted.

H. SIMPSON, Chairman of Committee.
W. C. WILKINSON, Secretary-Treasurer.
Toronto, Ont.

[FOR ADDITIONAL ADVERTISEMENTS FOR TENDERS SEE NEXT PAGE.]

SEALED TENDERS

will be received by the undersigned up to 6 p m, FRIDAY, THE 29TH DAY OF JUNE, 1906, for the construction of about 112,000 square feet of Cement Walks in the Town of Goderich.

Specifications and draft contract may be seen at the Town Clerk's office.

Tenders will be received for the whole or any part

A marked cheque or other security satisfactory to the Council for 10 per cent. of the amount of the tender must accompany same.

No tender necessarily accepted.

M. O. JOHNSTON,
Town Clerk.

SEALED TENDERS

will be received up to 12 o'clock noon on MONDAY, THE 2ND PROXIMO, for the several works required in carrying out the mid-summer repairs, including stoves, etc., at the various Separate Schools in Toronto. Tenders to be addressed to J. Cadaret, Esq., Chairman Sites and Building Committee, Separate School Board, 28 Duke street. Specifications may be seen and all information obtained at the office of the Architect, A. W. Holmes, 10 Bloor street east. Each tender must be accompanied by the deposit mentioned in specifications. The lowest or any tender not necessarily accepted.

CITY OF WOODSTOCK

Tenders for Sewers

Sealed tenders, addressed to John Morrison, City Clerk, Woodstock, Ont, will be received up to 4 p.m. of FRIDAY, JULY 6TH, for the construction of about 5,600 lineal feet of 8", 10", 12" and 15" glazed tile sewer on Winniett and adjoining streets; also about 1,900 lineal feet of 10" and 12" sewer on Wellington Street.

Plans and specifications may be seen at the office of the undersigned.

The lowest or any tender not necessarily accepted.

F. J. URE,
City Engineer.

NOTICE TO CONTRACTORS

Tenders will be received by the undersigned up to 12 o'clock noon of SATURDAY, JUNE 30TH, 1906, for the construction of a

Steel Concrete Bridge

at Aultsville, Ont. (estimated cost $2,700).

Plans and specifications may be seen at the office of the Reeve, W. J. Ransom, Dickinson's Landing, Ont., or with the engineer, W. H. Magwood, C. E., Cornwall, Ont.

The lowest or any tender not necessarily accepted.

H. E. HODGINS, Clerk,
Osnabruck Centre, Ont.

Dated at Osnabruck this 13th day of June, 1906.

Department of Railways and Canals

RIDEAU CANAL NOTICE TO DEALERS IN CEMENT

Sealed tenders addressed to the undersigned and endorsed "Tender for Cement," will be received at this office until 16 o'clock on SATURDAY, THE 30TH JUNE, 1906, for the supply of 1,750 barrels of Portland Cement, to be delivered in sacks.

Specifications can be procured at the office of the Superintending Engineer of the Rideau Canal, Canadian Building, Ottawa, on and after this date.

The Department does not bind itself to accept the lowest or any tender.

By order,
L. K. JONES,
Secretary.

Department of Railways and Canals,
Ottawa, 8th June, 1906.

Newspapers inserting this advertisement without authority from the department will not be paid for it.

TENDERS FOR WALKS

Sealed tenders will be received by the undersigned up to noon, FRIDAY, JULY 6TH, 1906, for the construction of Cement Walks required in the Village of Grand Valley for the year 1906.

Tenders to state price per square foot for sidewalks and crossings.

Specifications and further information may be had from the Clerk.

The lowest or any tender not necessarily accepted.

WM. McINTYRE, Clerk,
Grand Valley, Ont.

CITY OF MEDICINE HAT

TENDERS

for the construction of concrete sidewalks will be received at the office of the Secretary-Treasurer up to 4 p. m. MONDAY, JULY 9TH, 1906.

North Side of C. P. R. Track.

About 6 922 square yards of concrete walks, 721 square yards of crossing, 3,737 lineal feet combined (curb and gutter), 1,530 cubic yards of excavation, 219 cubic yards of embankment.

South Side of C. P. R. Track.

About 6,922 square yards of concrete walks, 721 square yards of crossings, 3,737 lineal feet of combined (curb and gutter); 1,530 cubic yards of excavation, 219 cubic yards of embankment.

The Council is prepared to receive tenders covering the entire work or separate tenders for work north and south of the track.

Plans and specifications may be seen and forms of tender procured at the office of the City Engineer.

A certified bank cheque to the value of 5 per cent. of the cost of the work must accompany each tender.

Separate tenders will also be received for the position of foreman of said work.

The Council reserves the right to accept or reject any tender.

WM. P. MORRISON,
City Engineer.

Medicine Hat, June 22nd, 1906.

CITY OF MEDICINE HAT

TENDERS

For the supplying of the following plant and materials will be received at the office of the Secretary Treasurer up to 4 p.m. JULY 21ST, 1906:

GAS SUPPLIES.

3,350 ft. of 2½ inch black iron pipe; 8,350 ft. of 4 inch pipe; 2,500 ft. of 3 inch pipe; One 2½ inch off 4 inch 45°y; One 3 inch off 3 inch 45°y; Six 4 inch off 4 inch 45°y T's; Five 3 inch off 4 T's; Six 2½ inch off 2½ inch T's; Two 4 inch to 3 inch reducers; One 6 inch regulator with 2½ inch inlet, 4 inch outlet and automatic cut off; Two 2½ inch brass globe valves; Three 4 inch iron globe valves.

WATER SUPPLIES.

9,200 feet of 6 inch pipe tested to 150 lbs. pressure per square inch; 1,600 feet of 10 inch pipe tested to 150 lbs. pressure per square inch; Forty 6 inch valves; Thirteen fire hydrants; 1,250 lbs. of lead; Twenty eight 6 inch T's; Four 6 inch 45°y's; Three ⅛ bends 6 inch; Four 6 inch off 10 inch crosses; One 10 inch 45°y; One ⅛ bend 10 inch; One 6 inch cross; One reducer 10 inch to 6 inch; Four 10 inch sleeves; Twelve 6 inch sleeves.

Tenders will be received for both wood and cast iron pipe and also for specials, hydrants and valves to suit, wood or iron pipe.

A circular stand pipe to contain 500,000 gal. about 70 ft. high erected complete upon foundation to be supplied by the city.

Two mechanical filters having a capacity of 500,000 gal. each in 24 hours delivered F.O.B. cars here with the superintendence of erection.

Full description of plans and specifications of the Stand Pipe and Filters must accompany each tender.

All information required will be supplied by the City Engineer.

The lowest or any tender not necessarily accepted.

WM. P. MORRISON.

Medicine Hat, June 21st, 1906.

CONTRACTS OPEN.

CLARESHOLM, ALTA. — A new hotel is to be built here to cost $15,000.

VICTORIA, B.C.—The C.P.R. are preparing to erect a large warehouse here.

HALIFAX, N.S.—J. C. Dumaresq & Son, architects, will receive tenders up to June 30th for erection of an office building for the Canadian Bank of Commerce.

BARRIE, ONT.—The Building Committee of the Y.M.C.A. will soon call for tenders for the erection of their new building.

WOODSTOCK, ONT. — Tenders have been taken for the erection of a building of the Canadian Bank of Commerce.

EAST EDMONTON, ALTA. — Edward Gee will receive tenders up to July 1st for the purchase of $1,400 school debentures.

PORT COLBORNE, ONT. — Mr. Lynhardt, architect, New York, is preparing plans for the new cement works to located here.

ST. MARY'S, ONT.—Capitalists of this town and Embro are promoting a scheme to construct a railway to connect the two towns.

BRACEBRIDGE, ONT. — G. W. Sibbett will receive tenders up to July 3rd for repairs and improvements to the school building.

ST. JOHN, N.B.—The directors of the Royal Bank have decided to build a five-storey building corner King and Canterbury streets.

NORTH BAY, ONT.—M. W. Flannery, Town Clerk, will receive tenders up to June 30th for $10,000 4½ per cent. school debentures.

NAPANEE, ONT.—W. G. Wilson, County Clerk, will receive tenders up to July 4th for the purchase of $18,400 4 per cent. debentures.

ST. CATHARINES, ONT. — W. Mittleberger will receive tenders up to June 29th for the purchase of $61,319 96 4 per cent. debentures.

CARLYLE, SASK. — F. J. Stent, Town Clerk, will receive tenders up to July 5th for purchase of $5,000 5 per cent. town Debentures.

CARDSTON, ALTA.—Tenders will be received by the Secretary-treasurer up to July 2nd for $30,000 waterworks and electric light debentures.

OXFORD CENTRE, ONT.—F. G. Jackson will receive tenders up to July 2nd for completion of the Newton drain in East Oxford township.

WOLSELEY, SASK.—A. B. Bompas will receive tenders up to June 30th for erection of Presbyterian church. Plans with R. J. Campbell.

NEEPAWA, MAN. — The Town Council gives notice of its intention to construct granolithic sidewalks on Fifth street and Mountain avenue.

OWEN SOUND, ONT. — Tenders have been taken for construction of cement concrete sidewalk and sewers also for supply of sewer pipe.

MOOSE JAW, SASK.—Jones & Bunyard, architects, will receive tenders up to June 28th for erection of a brick hotel on River street for G. Perry.

ROBLIN, MAN. — Fulkerson & Dempsey will build a block on Main street.—J. D. McLaren will erect an implement warehouse and office.

VICTORIA, B. C.—Pitcher & Leiser will erect a four storey brick and stone office building and warehouse, corner Fort and Wharf streets, cost $50,000.

WATERLOO, ONT.—A by-law will be submitted to loan $10,000 to Mr. Deisenroth for the establishment of a factory for the manufacture of hardwood finishings.

SAULT STE. MARIE, ONT.—The plans for St. Andrews' church here were prepared by Jas. Thomson, 123 Bay street, Toronto, instead of Jas. Townsend, as given in the CONTRACT RECORD of June 13th.

LETHBRIDGE, ALTA.—A by-law will be voted on July 13th to raise $40,-

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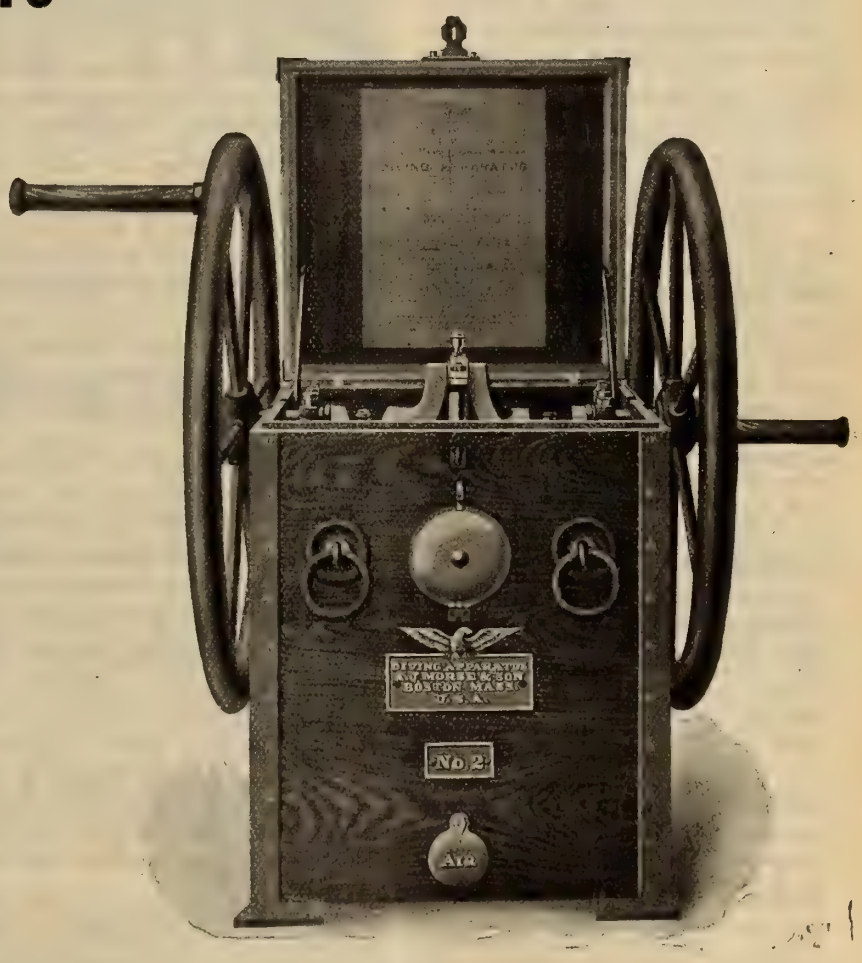

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MONTREAL

000 for waterworks extension. — R. O'Hagan intends building a brick residence on Redpath street.

WOODSTOCK, N.B.—E. K. Connell has taken tenders for the erection of an addition to Broadway school —Engineer Barbour, Boston, will report on improvements in the waterworks system.

PARRY SOUND, ONT. — E. E. Armstrong, Town Clerk, will receive tenders up to July 3rd for construction of cement sidewalks on Great North road, Church, Mary and James streets.

GREENSVILLE, ONT.—I. N. Binkley will receive tenders up to July 14th for improvements in the West Flamboro drain, Wentworth county. Plans with Tyrell & Mackay, engineers, Hamilton.

ST. BONIFACE, MAN.—Plans for the construction of the new building for St. Joseph's Orphanage are being prepared.—The Cusson Lumber Co. purpose erecting buildings near the C.N.R. track.

FORT WILLIAM, ONT.—J. C. Stinson, architect, has called for tenders for erection of a three-storey tenament. —H. R. Halton, architect, has taken tenders for erection of a business block for A. Dawson.

EDMONTON, ALTA.—J.B.Gardner has purchased a site on Jasper street for the erection of an eight-storey office building.—The Council have proposed the extension of the power house plant, cost $10,000.

QUEBEC, QUE. — F. Gelinas, Department of Public Works, Ottawa, will receive tenders up to June 29th for erection of a store building at the Dominion Arsenal.—The C.P.R. propose extensive harbor improvements here.

GLADSTONE, MAN. — Tenders will be received up to June 30th for remodelling the public school building.—Tenders will be received up to July 22nd for building a bridge also for laying of gas pipe. Plans with A. G. Williams.

SOURIS, MAN. — J. W. Breakey, Town Cleak, will receive tenders up to June 30th for construction of concrete abutments, also 75 foot steel bridge across Plum creek. Plans with above named and at Public Works Department, Winnipeg.

HAMILTON, ONT.—Cement curbs will be constructed on Jackson and Bay streets and cement walks with curbs on Bold, Caroline and Peter streets.—The Fire & Water Committee have decided to improve the waterworks system, costing $7,000.

LOWER BRIGHTON, N.B.—C. H. LaBillois, Department of Public Works, Fredericton, will receive tenders up to July 9th for rebuilding Nixon's bridge, Carleton county. Plans at the Department and with Hon. W. T. Jones, Woodstock, and H. Tedlie.

SASKATOON,SASK.—W. Chipman, C. E., Toronto, has submitted a plan of waterworks, electric light and sewage for the town cost $219,000. — S. Hill, of Markdale, Ont., is considering the erection of a sash and door factory here.—W. P. Bate, Box 7, will receive tenders up to July 4th for erection of four-room addition to the brick school and for erection of a four-room brick school in ward two.

CORNWALL CENTRE, ONT.—J. Mullin, Township Clerk, will receive tenders up to July 16th for construction of four re-inforced concrete and four ordinary concrete piers for the following bridges across river Aux Raisin, in Cornwall Township: Moulinette road bridge, Mille Roaches road bridge, McGillis' bridge and St. Andrews bridge. Plans with above named and with Magwood & Walker, Civil Engineers, Cornwall.

LONDON, ONT. — The following building permits have been issued: J. Fraser, brick warehouse on King street; H. Cronyn, brick block, corner Dundas and Adelaide streets; London Canning Co., factory building, corner Rectory and Simcoe streets, cost $5,000; Mr. Grimshaw, brick residence, corner Ridout and Emery streets; W. Macdonald, brick residence, 511 Grosvenor street; J. Young, brick residence on Craig street.— A scheme for establishment of Public baths has been submitted to the City Council, cost about $4,800.

MEDICINE HAT, ALTA.—The by-laws to raise $40,000 for waterworks extension etc., $8,000 for extension of natural gas system and $10,000 for new Municipal building have been carried.—Stewart & Tweed have decided to build a large block on Main street, adjoining their present premises.—Tupin Bros. intend building a block on Main street.—The City Council will call for tenders for sand-pipe and filters, for construction of sidewalks, also for purchase of city debentures.

STRATFORD, ONT.—T. J. Wilkins will build a large factory on Nile street. —The following building permits have been issued: John F. Yates, brick veneer residence, Queen street; Frank Baker, brick veneer residence, Queen street; W. M. O'Beirne, printing office, Ontario street; J. M. Fraser, brick residence, Front street; Israel Hurlburt, residence Albert street; Alf. McCloy, two brick veneer residences, Cobourg street; Mrs. McLeod, frame residence, Perth street. —A by-law will be prepared to raise $18,000 for the extension of the waterworks system.

VANCOUVER, B. C. — Grant and Henderson, architects, have taken tenders for the erection of additions to the Lighthouse Hotel corner of Cordova and Homer streets.—Plans are being made for a three-storey brick and stone block corner Pender and Burrard streets, cost about $25,000.—Parr & Fee, architects, are preparing plans for a business block for Mayor Buscombe on Hastings street. —At the Court of Revision a by-law was adopted authorizing the construction of 15 miles of cement walks, estimated cost $117,000.—The Vancouver Flour Mills, Limited, are preparing to erect a large flour mill here at an early date.

OTTAWA, ONT.—L. K. Jones, Department of Railways and Canals has taken tenders for supply of 1,000 barrels of Portland cement for the Trent canal. —Hugh Carson has purchased a site, corner Musgrove and Rideau streets, on which to erect a large harness factory.—The following building permits have been issued; James Driscoll, brick veneer dwelling, Stewart street, $4,500; J. G. Davidson, brick dwelling, Gladstone avenue, $3,500; Albert Lyon, brick veneer dwelling, Mutchmor street, $1,800; Miss Edith Taylor, brick dwelling, Lisgar street, $3,000.—The City Council gives notice of its intention to construct concrete sidewalks on Somerset, Bay, MacLaren, McLeod and Botelier streets and tar macadam pavement on Nelson street.

MONTREAL, QUE. — The First Baptist church on St. Catherine street has been sold, it is rumored for a vaudeville theatre site.—The Vaudeville theatre will be situated at the corner of City Councillor and St. Catherine streets. Building will soon begin.—The following building permits have been issued: Extension to Windsor Hotel, cost $500,000; Polytchnic school, on St. Denis street, cost $33,000; Emmanuel Congregational church on Drummond street, cost $77,000; J. F. Fortier, two dwellings on Dufresne street, cost $5,000; V. Depatie, tenement house on Huntley street, cost $4,000; A. Pelow, two dwellings on Notre Dame street, cost $8,000; Catholic school building, Richmond street, cost $25,000; Northern Electric Co., shop on Guy street, cost $13,000; W. Bentham, apartment house on Sherbrooke street, cost $80,000; H. Bedard, two dwellings on St. Catherine street, cost $3,000; Montreal Street Railway Co., a power house in Hochelaga ward, cost $95,000.

WINNIPEG, MAN.—D. Smith, architect, has taken tenders for the erection of a residence on Edmonton street for A. Strang. The same architect has taken tenders for construction of a grain elevator for the Canada Paint Company. —Darling & Pearson, architects, will receive tenders up to June 30th for erection of a building corner Main street and Portage avenue for Osler, Hammond and Nanton. The same architects have taken tenders for erection of a building corner King and Bannatyne streets for the Northwest Commercial Travellers' Association.—E. R. Workman, architect, has taken tenders for erection of a dwelling on Simcoe street for N. O'Neill.—F. R. Evans, architect, has prepared plans for a residence on Donald street for C. A. Baskerville, cost about $11,000. —Hooper&Walker,architects, have taken tenders for the erection of Lodge building for the Icelandic lodges.—H. B. Rough, architect, will receive tenders up to June 30th for erection of a brick and stone apartment building on Gertie street for the Frontenac Building Company.—G. G. Teeter, architect, has taken tenders for the erection of a residence on Maplewood avenue, Riverview. Hooper & Walker, architects, will receive tenders up to June 30th for erection of a brick convent for St. Joseph's Orphan Home.—J. H. G. Russell, architect, will receive tenders up to June 29th sor additions to warehouse of J. H. Ashdown Hardware Co.—Tenders will be received up to June 29th by the Guardian Securities Incorporated for erection of five cottages.—J. H. Cadham, architect, will receive tenders up to July 3rd for erection of a brick and stone building, corner McDermott and Kate streets.—Committee on works will receive tenders up to July 3rd for supply of sewer pipe and junctions.

TORONTO, ONT. — H. Simpson, architect, is preparing plans for residences for A. E. Walton, J. Laurie, H. E. Bidwell, T. Rennie and D. Prentis, costing from $6,000 to $10,000.—The Property Committee have approved of a site on Leslie street for the new Riverdale High school.—G. W. Gouinlock, architect, is preparing plans for the new building on the Exhibition Grounds for the C.P.R., C.N.R., and G.T.R., cost about $50,000. The same architect is preparing plans for a factory building for the American Separator Company.—The Caer-Howell Hotel on University avenue is to be rebuilt at a cost of $150,000. H. Simpson, architect, is preparing plans. — J. A. Cadaret, Chairman Separate School Board, 28 Duke street, will receive tenders up to July 2nd for repairs at the Separate school.—W. C. Wilkinson, City Hall, will receive tenders up to July 3rd for enlargement of Brock avenue, Palmerston avenue and Dovercourt Public schools.—Tenders are taken at 6 Garden avenue, Parkdale, for erection of a house on Lansdowne avenue.—J. C. B. Horwood, architect, will prepare plans for Sunday School building for Bathurst street Methodist church, cost $20,000.—Toronto Gas & Gasoline Engine Co., 145 Dufferin street, are calling for tenders for building an iron foundry.—The Board of Control will receive tenders up to July 3rd for construction of asphalt pavements on Broadview and Delaware avenues and Queen street west; bricck pavement on Fraser avenue and Charlotte street; bithulithic pavement on Howie avenue and a number of concrete walks and other works.—Building permits have

been issued as follows: M. E. Cook, 2½-story brick and stone dwelling, 303 Lansdowne avenue, cost $3,200; T. Johnston, 2-story brick dwelling, Gladstone avenue, near Stone House crescent, cost $2,500; W. Hogan, 2-story brick dwelling, Roxborough street, near Avenue road, cost $2,900; C. Coulter, 2-story brick store and dwelling, corner Bellwoods avenue and Arthur street, cost $2,700; A. Cochrane, 2 story brick store and dwelling, corner Delaware avenue and College street, cost $3,400; E. G. Wilson, 2-story brick and stone dwelling, Langley avenue, cost $3,200; T. Russell, 2½-story brick dwelling, Leslie street, cost $2,600; E. J. Lea, 2-story brick dwelling, Gladstone avenue, near Fairmont, cost $2,000; W. H. Mitchell, 2-story and attic brick dwelling, Barton avenue, cost $3,000; J. D. Wilson, pair 2-story and attic brick dwellings, 239-241 St. Clarens avenue, cost $6,000; G. Forbes, 2-story brick dwelling, 59 Lee avenue, cost $2,500, A. Thomas, 1½-story brick dwelling, Emerson avenue, cost $2,400; St. Simon's Rectory, 2-story and attic brick dwelling, Howard street, cost $7,500; C. W. Chadwick, 2-story and attic brick dwelling, 131 Delaware avenue, cost $4,000; A. Cousins, 2-story and attic brick dwelling, Wright avenue, cost $2,800; J. A. Harvey, 2-story and attic stone and brick dwelling, Palmerston avenue, near Herrick street, cost $6,000; W. R. Hunter, 2-story brick and stone dwelling, Lindsay avenue, cost $4,800; W. Henry, two 2-story brick dwellings, corner Bellwoods and Gore Vale avenues, cost $5,500; L. V. Armstrong, 2-story brick dwelling, Gladstone avenue, near Hepbourne street, cost $2,400; J. E. Bach, 2-story and attic brick dwelling, Oriole road, cost $6,800; Excelsior Life Insurance Co., 3-story addition, 59 61 Victoria street, cost $20,000; F. Hillock, two 2½-story brick dwellings, Simpson avenue, cost $5,000; F. Doane, 2-story brick dwelling, Charles street, near Church, cost $4,000; A. B. Brown, pair 2-story and attic brick dwellings, 70-72 Dupont street, cost $6,000; M. Armstrong, pair 2-story and attic brick dwellings, Grace street, cost $5,000; J. Kee, pair 2-story brick dwellings, Abbott street, cost $4,000; Canada Realty Co., 6-story stone, brick and steel bank, stores, offices, etc., corner Bloor and Yonge streets, cost $100,000, R. Schofield, 2-story machine shop, Carlaw avenue, cost $4,000; Hamilton & Leach, pair 2-story stone and brick dwellings, 243-5 Havelock street, cost 4,500; G. Pearson, 2-story concrete and cement block store and dwelling, Sheridan avenue, cost $4,000; E. C. Tuckett, pair 2-story brick and stone dwellings, Sinclair avenue, cost $4,000; A. Bruce, 2-story brick and stone dwelling corner Elgin avenue and Bedford road, cost $9,000; H. Goldmar, 2½-story brick dwelling, 197 Richmond street west, cost $3,100; O'Keefe Brewery Co., hotel corner Yonge and Alexander streets, cost $3,500; Acton Publishing Co., 4-story

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brick factory and warehouse, 54 John street, cost $12,000; M. B. Russell, 3-story brick dwelling, Chestnut Park road, cost $9,000; Mrs. E. Green, 2-story and attic stone and brick dwelling, Concord avenue, cost $3,200; J. Virtue, three 2½-story stone and brick dwellings, Lakeview avenue, cost $7,000; J. J. Walsh, 2-story brick and stone dwelling, 56 Wilson avenue, cost $3 500; T. Taylor, 2-story brick and stone store Bloor street, near Ossington avenue, cost $2,500; Dr. J. A. Gallagher, 2-story brick dwelling, corner Broadview and Langley avenues, cost $10,000; W. Duckworth, three 2½-story brick and stone dwellings 117-121 Huron street, cost $8,000; R. Farthing, 2½-story brick dwelling, 688 Bathurst street, cost $5,500.

CONTRACTS AWARDED.

CARBERRY, MAN.—Construction of cement walks: J. Fowler, contractor.

GLENCOE, ONT.—Erection of knitting factory: Mr. Mitchell, Caradoc, contractor.

MARTHA, MAN.—$3 500 school debentures: J. W. Nay, Regina, purchaser.

BAWLF, ALTA.—$2,500 school debentures: J. W. Nay, Regina, purchaser.

CAMROSE, ALTA.—$5,000 5 per cent. school debentures: J. W. Nay, Regina, purchaser.

OAKVILLE, MAN.—$5,000 school debentures: Canada Life Assurance Co., purchasers.

WALKERTON, ONT.—Additions to Rattan factory: R. Truax & Co., cost about $4,500.

OAK RIVER, MAN. — Erection of central school: Bullock & Stedham, contractors, Brandon.

BOWDEN, ALTA. — $5,000 five per cent. school debentures: J. W. Nay, Regina, purchaser.

TRURO, N. S.—Store building on Inglis street for G. H. Johnston: Frank Wilson & Co., contractors.

ACTON WEST, ONT.—Construction of cement walks: S. J. Barlow & Co., Guelph, contractors.

PARIS, ONT.—Construction of cement walks in town: Silica-Barytic Stone Co., Ingersoll, contractors.

REGINA, SASK. — Wascana Hotel building: Smith Bros. & Wilson, contractors, cost about $53,000.

GUELPH, ONT.—Residence on Queen street for Dr. T. B. Macauly: H. A. Clemens & Co., cost $12,000.

STRATHCONA, ALTA.—Erection of Holy Trinity church: W.H. Martin & Co., contractors, cost about $8,000.

COLLINGWOOD, ONT. — Construction of Silex walks: Pettypiece Silex Stone Co., Amherstburg, contractors.

PETERBORO, ONT.—Plumbing, heating and lighting of new carpet factory: McGregor & Reid, contractors.

CALGARY, ALTA.—Supply of C. I. pipe for the waterworks: Evans, Coleman & Evans, Vancouver, B. C., contractors.

OAKLAND, MAN.—Oakland extension of the C.N.R. to Makinak, 65 miles: Mr. Cowen, Portage la Prairie, contractor.

GRAND FORKS, B.C.—Extension of Kettle Valley Railway, 50 miles: W. P. Tierney & Co., Nelson, contractors, $1,300,000.

ORILLIA, ONT.—Construction of new cement dam at Ragged Rapids: Quinlin & Robertson Montreal, contractors, cost $46,487.11

HARRISTON, ONT.—Construction of bridge on Sixth Concession Minto: Concrete abutments, Shortreed Bros.; steel work, A. Hill & Co., Mitchell.

MIMICO, ONT.—Rebuilding Victoria Industrial school: Brick work, Holiby Bros.; carpenter work, J. McKenzie; plastering, Taylor & Nesbitt; painting, H. W. Johnson; roof and sheet metal work, G. Duthie & Sons, cost about $15,000. H. Simpson, Toronto, architect.

FORT WILLIAM, ONT.—Installation of new switchboard in telephone exchange: International Telephone Manufacturing Co., Chicago, Ill., contractors.

PRINCE ALBERT, SASK.—Hotel for Hipple & McBeth on Central avenue: T. E. Baker & Co., contractors, cost $30,000. H. A. Magoon, Edmonton, architect.

SASKATOON, ONT.—Construction of sewerage system: Whiteman & Peck, Edmonton, contractors.—Suppyl of sewer pipe: W. F. Lee, Winnipeg, contractor.

PORTAGE LA PRAIRIE, MAN.—Construction of bridges and culverts on the G.T.P.R. from this town to Pine creek: D. S. Sands, Westbuorne, contractor.

QUEBEC, QUE. — Montreal Bank building on Peter street: Masonry, W. Sharpe, contractor. — Protestant school building, St. Joachim street: Masonry, A. Fackney; carpentry, L. Peters; painting, Marchant Bros., cost about $40,000.

MONTREAL, QUE.—New building of the Montreal Light, Heat & Power Co.: John Quinland & Co., contractors.—Construction of No. 5 fire station: P. Labelle, successful tenderer, $15,950.—Extension of Windsor Hotel, P. Lyall & Sons, contractors, cost about $500,000. Hutchinson & Wood, architects.

LONDON, ONT. — Kentucky rock asphalt-faced macadam roadway on King street, between Maitland and Wellington: Blighe & Felder, Chatham, at $8,372; Masillon brick pavement, York street, Talbot street to the river: Forest City Paving Company, London, at $10,990; on Talbot street, King to York street: Geary & Lewis, London, at $4,420; on the Market Lane: Geary & Lewis, London, at $790.

WINNIPEG, MAN.—Addition to the Miserecordia hospital on Armstrong's Point: Stone and brick work, Peterson & Eielback, contractors. J. A. Senecal, architect.—Apartment house, corner of Furby and Portage avenues, for M. Shipley: Hinds & Mitchell, contractors, cost $26,000. J. Chisholm, architect.—Additions and alterations to residence on Armstrong's Point for A. Jardine: J. W. Foster, contractor, cost $4,000. J. Chisholm, architect.

OTTAWA, ONT. — Erection of St. Peter's school on Friel street: H. Pepin & Co., successful tenderers, cost $10,000.—Additions to St. Jean de Baptiste school: H. Carrisse, contractor, cost $15,000.—Additions to St. Agatha school: Brickwork and masonry, Thomas & Boyer, $2,293; plastering, J. McLaughlin, $224; carpenter work, by day labor.—Rebuilding Mechicansville school: stone and brickwork, L. G. Whelan, contractor.—Excavation and concrete work on Bank street subway: T. S. Kirby & Co., contractors, cost about $30,000.

TORONTO, ONT. — Residence on Charles street: Mason and brick work, Albert Webb; carpenter work, S. R. Alexander. — Residence on Havelock street: Mason work, J.C. Claxton.—Residence for E. Gurney: Brick and stone work, Page & Co.—Residence for Mr. Ainslie in Glen Grove Park: Canadian Art Stone Co.—Hotel, corner Queen and Bay streets: Excavation, Page & Bricknell; masonry, F. Holmes.—Pair of houses on Grace street: Mason and brick work, J. C. Claxton; carpentry, S. R. Alexander.

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G. W. Gouinlock is architect for the above buildings.—The Board of Control have awarded the following contracts for asphalt pavements: Walmer road, Bloor to Castle avenue, Barber Asphalt Company, $7,055; Beatrice street, 400 feet north of Arthur to a point 675 feet further north, Godson Contracting Company, $3,255; Salisbury avenue, Sackville street, 463¼ feet east, Construction and Paving Company, $1,919; Lobb avenue, Crawford to Shaw street, Barber Asphalt Company, $1,214; Bernard avenue, St. George street to Spadina road, Barber Asphalt Company, $3,441. Bitulithic pavements: McMaster avenue over to Rathnally avenue, Warren Bitulithic Paving Company, $3,112; Concord avenue, Northumberland to 712 feet north, City Engineer, $5,213. Brick pavement: Argyle street, Dundas to Dovercourt road, James F. Conolly, $5,277.

FIRES.

Robertson's hall and adjacent property in Edmonton, Alta., loss $20,000.—Saw mill of the Yale Columbia Lumber Company, at Nakusp, B.C., and stock of lumber totally destroyed, loss $25,000.—The Leland Hotel, Winnipeg, Man., damage $25,000.—The Electric Light Plant at Trail, B.C., loss $18,000.—The plant of the Warren Bituminous Paving Company, Toronto, damage $3,500.—Curry block, Ouilette avenue, Windsor, Ont., loss $15,000.

BUILDING IN MONTREAL.

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BUSINESS NOTES.

The firm of J. B. Thomas & Frere, stonecutters, Montreal, have dissolved partnership.

The firm of Berthaiume & Pepin, plumbers, Montreal, Que., have dissolved partnership.

Donald Alexander Bethune, plumber, Montreal, has had his business registered under the foregoing name.

Jean B. Thomas and Arthur Guthier, contractors, Montreal, have registered under the name of Thomas & Guthier.

The business of Camille Hotte and Paul Foisy, builders, Montreal, Que., has been registered under the firm name of Hotte, Foisy & Co.

The firm of Bell & Waugh, plumbers, Ottawa, Ont., have dissolved partnership and the business will be continued by L. S. Bell.

Thomas Barbeau and Hermenegilde Dufort, contractors, Montreal, have registered their business under the firm name of Barbeau & Dufort.

William Ware, Frederick Ware and Edward Ware, plumbers, Montreal, have registered their business under the name of William Ware & Sons.

Napoleon Ouimet and Henri Ouimet, contractors, Montreal, Que., have registered their business under the firm name of Henri Ouimet & Co.

The business of De Maria, W. A. Pilote and Joseph V. LaPlant, contractors, Sherbrooke, Que., has been registered under the name J. V. LaPlant & Company.

Ernest Richardson and Joseph Simard, roofers and contractors, Montreal, have registered their business under the firm name of Richardson, Simard & Company.

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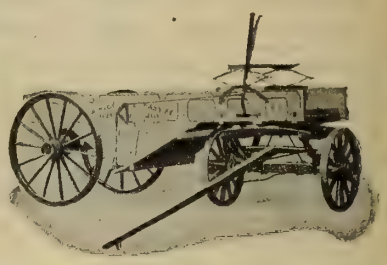

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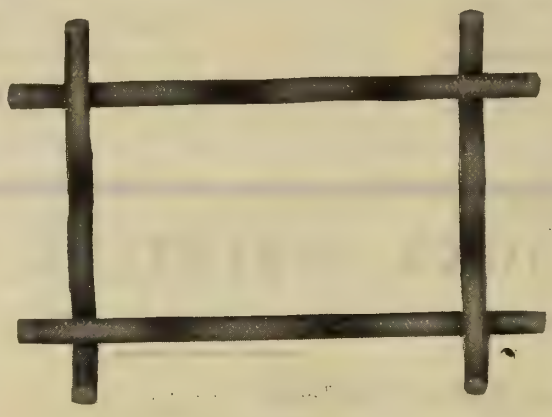

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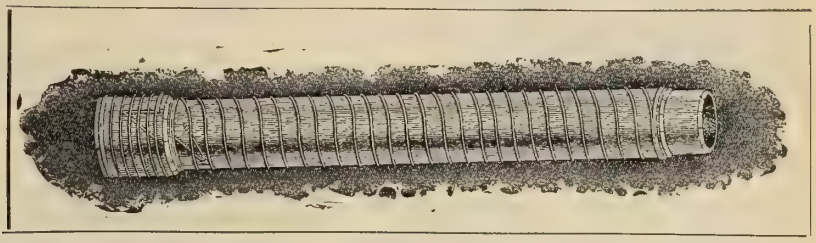

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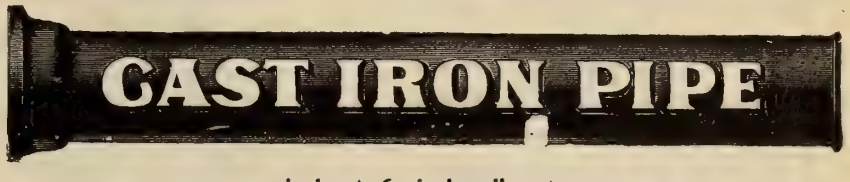

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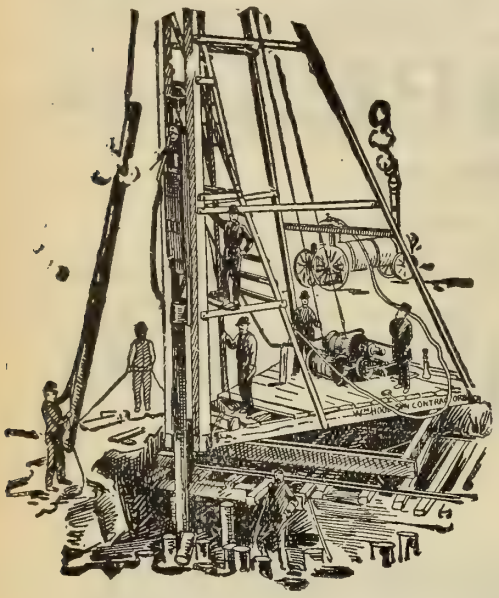

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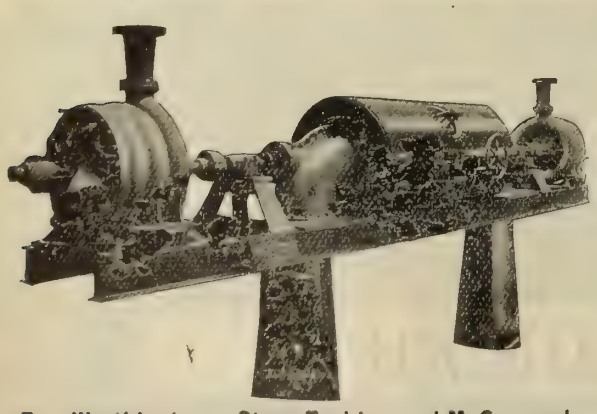

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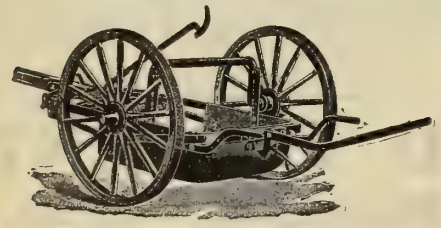

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							Neat.					3 (Sand) to 1 (Cement)				
					Initial	Final	1 dy.	7 dys.	28 dys.	3 mos.	1 yr.	1 dy.	7 dys.	28 dys.	3 mos.	1 yr.
1903	20	O.K.	3.135	2.1	162	345	307	701	783	827	*	74	214	299	367	*
1904	44	O.K.	3.150	2.0	132	342	300	744	848	914	938	86	262	354	401	427

* Tests for 1 year were not completed when records closed. 1905 report not yet issued.

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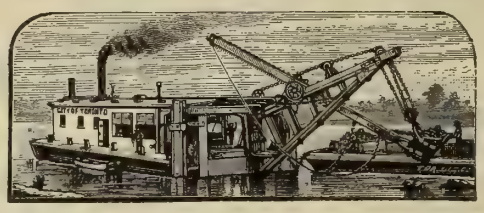

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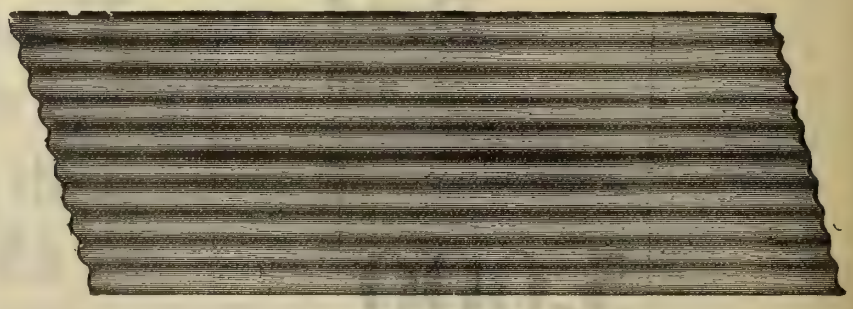

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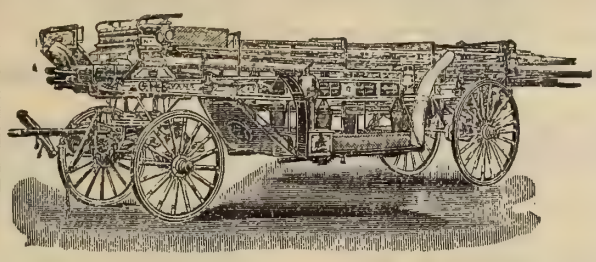

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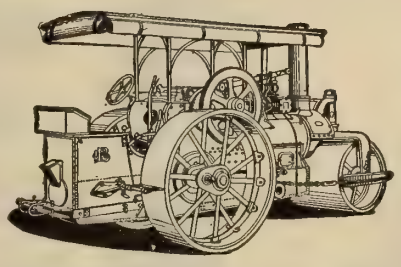

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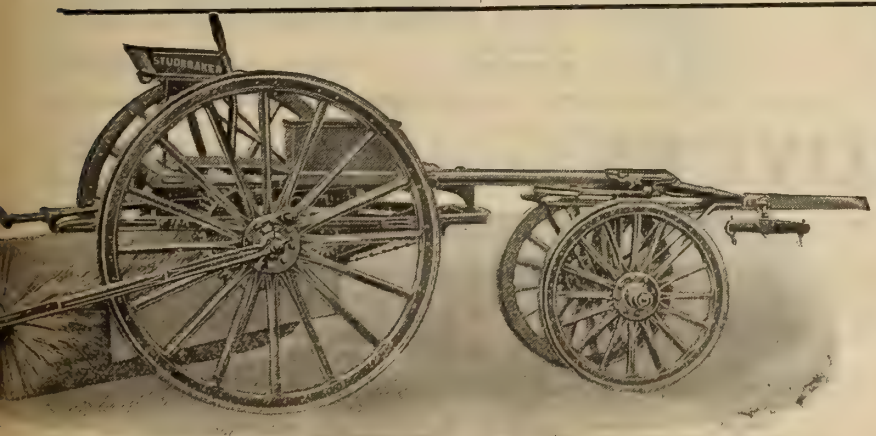

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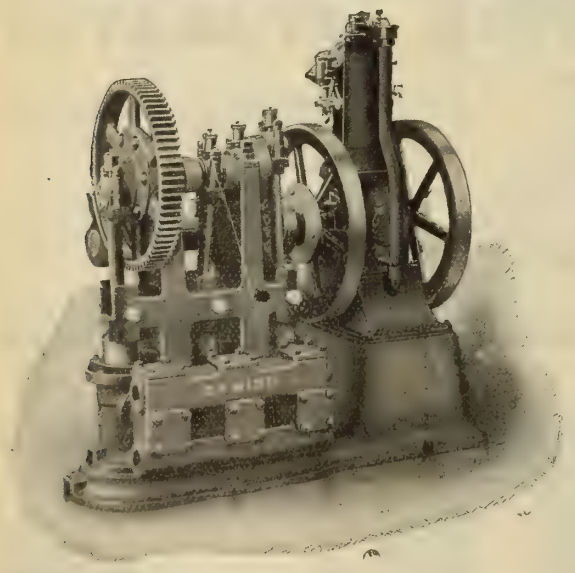

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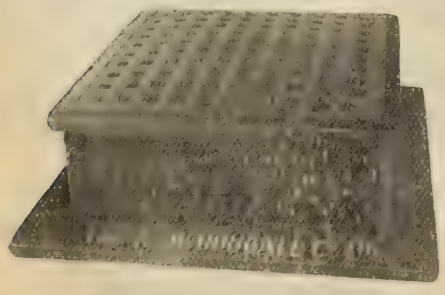

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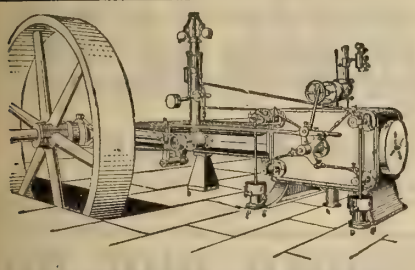

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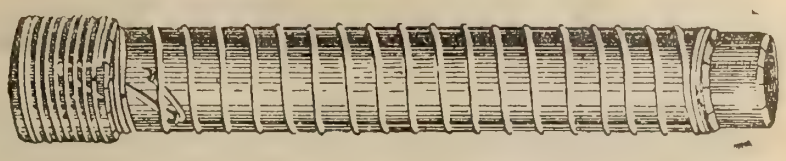

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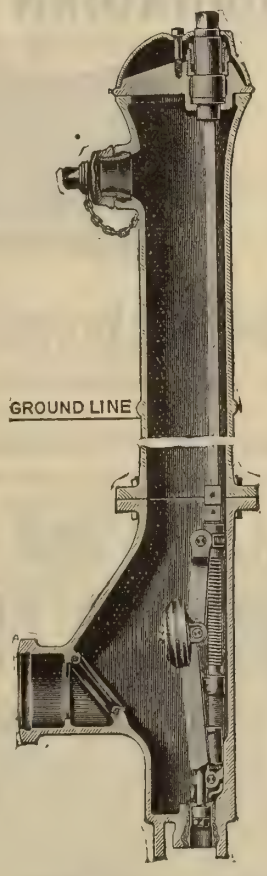

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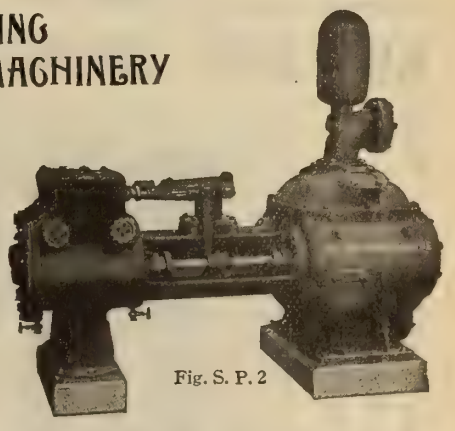

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36 TORONTO ST. - TORONTO, ONT

8 TO 10

contracts under construction continually.
That is why we can do work CHEAPER, QUICKER, BETTER, than small contractors.

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B. V. HOLE, MANAGER - - LONDON, ONT

THE ONTARIO ASPHALT BLOCK CO., L'T'D.

MANUFACTURERS OF

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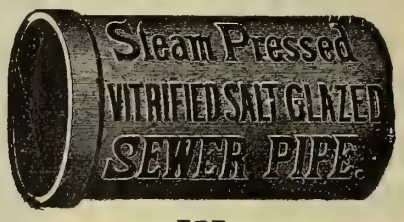

FOR

Sewers, Culverts and Water Pipes

Inverts for Brick Sewers

WRITE FOR DISCOUNTS

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"GIANT" AND "NORTHAMPTON"

PORTLAND CEMENT

For Immediate Delivery

The above Cement we fully guarantee to fulfill the requirements of Canadian and American Societies of Civil Engineers.

Large stock always carried at Fort William, Port Arthur and Duluth.

Telegraph, Telephone or write for prices.

STINSON-REEB BUILDERS' SUPPLY CO. Limited
MONTREAL, P. Q.

REGINALD LAWSON

WESTERN REPRESENTATIVE, UNION BANK BUILDING

Phone 3397 WINNIPEG, MAN.

For the Province of Saskatchewan:

REGINA STORAGE AND FORWARDING CO. — REGINA

Head Office and Works,

Toronto, Ont.

CAST IRON PIPE FOR WATER OR GAS

Special Castings,

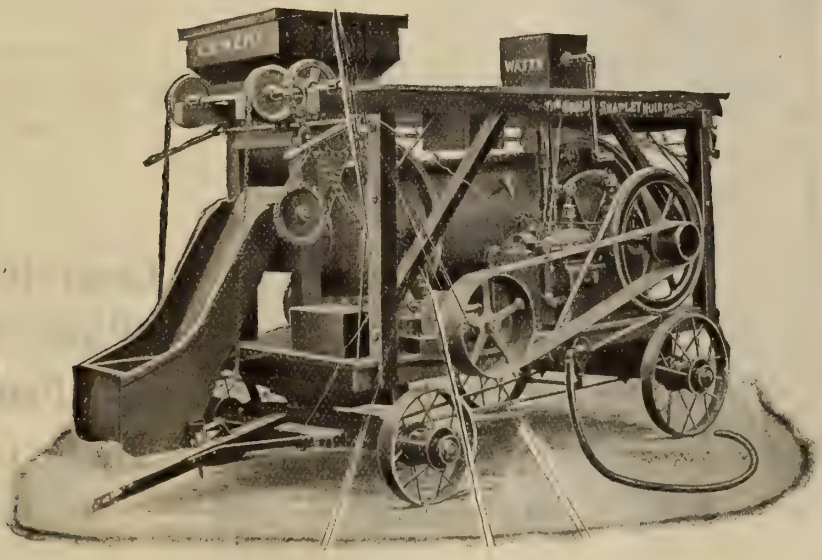
Tees, Crosses, Flanges Pipe, Valves, Hydrants,

Stand Pipes, Valve Boxes, Drinking and Ornamental Fountains.

District Offices: MONTREAL, HALIFAX, OTTAWA, WINNIPEG, VANCOUVER, ROSSLAND

Ideal Automatic Concrete Mixers

The Only Successful Automatic Mixer Made



We also manufacture **Windmills, Tanks and Towers** for Waterworks, Fire Protection, Etc.

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GOOLD, SHAPLEY & MUIR COMPANY, LIMITED

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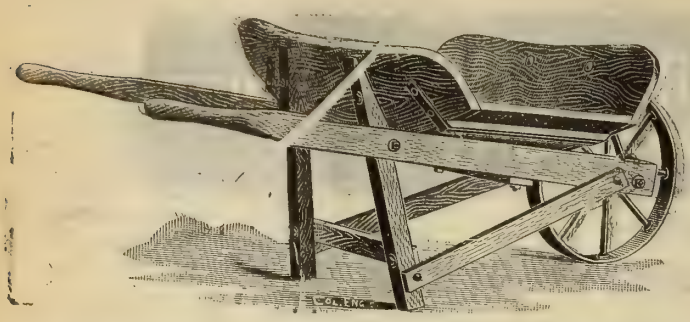

Barrows

We carry in Stock a most complete line of Barrows of all decriptions for immediate shipment.

NAVVY, PANAMERICAN, COAL, COKE, FOUNDRY, MORTAR, BRICK, GARDEN, TUBULAR, ETC., ETC.

Our Special Concrete Barrow is most popular

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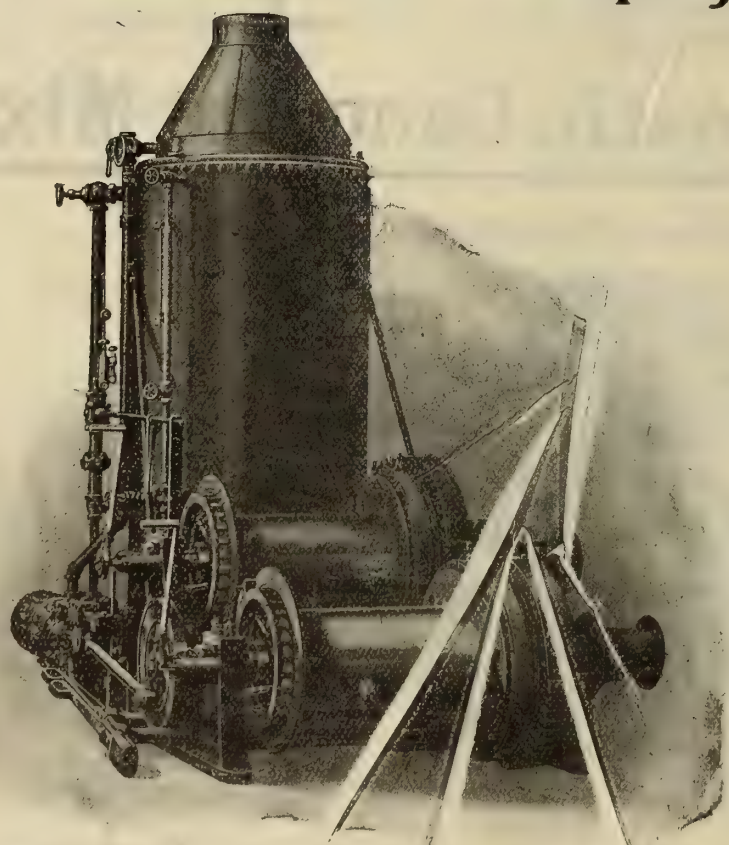

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All Sizes, Quick Deliveries Low Prices.

Concrete Mixers
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Successors to the Late James Cooper

MONTREAL

Dunn Bros., Winnipeg, Agents

CANADIAN

Contract Record

A Weekly Journal of Public Works, Tenders, Advance Information and Municipal Progress

This Paper Reaches Every Week the Town and City Clerks, Town and City Engineers, County Clerks and County Engineers, Purchasers of Municipal Debentures and Leading Contractors In All Lines Throughout Canada

VOL. 17. TORONTO, MONTREAL — JULY 4, 1906 — WINNIPEG, VANCOUVER No. 18

THE CANADIAN CONTRACT RECORD
PUBLISHED EVERY WEDNESDAY

As an intermediate Edition of the Canadian Architect and Builder.

THE C. H. MORTIMER PUBLISHING COMPANY
of Toronto, Limited,

Subscription Price, $2 per annum, payable in advance.

CONFEDERATION LIFE BUILDING, TORONTO
Telephone Main 2362.

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Subscribers who may change their address should give prompt notice of same. In doing so give both old and new address. Notify the publishers of any irregularity in delivery of papers.

Tenders Wanted

Tenders will be received, addressed to the Township Clerk, up to SATURDAY, JULY 14TH, 1906, for the "Cleaning Out and Improvement of the West Flamboro Drain," in the County of Wentworth

Length of drain, about 24,000 lineal feet. Plans and specifications may be seen and forms of tender obtained from the office of the Clerk, or at the office of the township engineers, Messrs. Tyrrell & Mackay, Hamilton, Ont.

The lowest or any tender not necessarily accepted.

IRA N. BINKLEY,
Township Clerk.

Box 42 Greensville, Ontario, June 18th, 1906.

Debentures For Sale

City of Medicine Hat, Alberta

Sealed tenders will be received up to MONDAY, AUGUST 20TH, 1906, for the purchase of $40,000 Waterworks, $8,000 Natural Gas and $10,000 Municipal Building Debentures of the City of Medicine Hat, dated August 1st, 1906, bearing interest at 5 per cent. per annum and repayable in 30 equal annual instalments of principal and interest. For further particulars apply to the undersigned. The highest or any tender not necessarily accepted.

W. N. ADSIT,
Secretary-Treasurer.

Sealed Tenders

addressed to M. W. Flannery, Town Clerk, will be received up to noon on SATURDAY, JULY 14TH, for the construction of about 40,000 square feet of artificial stone sidewalks in the Town of North Bay.

Plans and specifications to be seen at the office of the undersigned. A certified cheque payable to the treasurer for the sum of one hundred dollars ($100.00) must accompany each tender, this to be returned when the successful tenderer enters into a contract with the Town.

The lowest or any tender not necessarily accepted.

L. O. CLARKE, C. E.,
Town Engineer,
North Bay, Ont.

Tenders Wanted

Sealed tenders, marked "Tender," addressed to the undersigned, will be received up to 7.30 o'clock p. m. MONDAY, THE 9TH DAY OF JULY, 1906, for the construction of a Heating and Ventilating Systems in the Arnprior Public Schools, together with the alterations and repairs to existing structures consequent to such system.

Plans and specifications of the proposed work may be seen at the office of J. J. Cranston, Sr., M. D., Arnprior.

The lowest or any tender not necessarily accepted.

M. D. GRAHAM, Secretary,
Arnprior Board of Education.

Arnprior, June 26th, 1906.

PORT ELGIN WATER WORKS

Sealed tenders will be received by the Village Clerk until 8 p. m. on

TUESDAY, JULY 24TH, 1906,

for the construction of a system of Water Works for the Town of Port Elgin.

The works will be subdivided as follows:

Contract "A" Labor on Pipelaying, about 14,000 feet.
Contract "B" Pump House.
Contract "C" Water Tower and Foundation.
Contract "D" Cast Iron Pipes and Specials.
Contract "E" Fire Hydrants and Valves.
Contract "G" Pumping Machinery.
Contract "H" Boilers.
Contract "I" Well and Gallery.

Plans and specifications may be seen at the Town Hall, Port Elgin, or at the office of the Chief Engineer, Toronto, on or after July 6th, 1906.

D. GEDDES, Esq., Reeve, Port Elgin, Ont.
R. MUNRO, Esq., Village Clerk, Port Elgin, Ont.
WILLIS CHIPMAN, Esq., C. E., 103 Bay Street, Toronto, Ont.

Georgian Bay and Seaboard Railway

TENDERS

Tenders will be received by the undersigned up to noon on SATURDAY, JULY 7TH, for the grading, bridging, fencing, track laying, ballasting and other work required in connection with the construction of the above Railway from Victoria Harbor to a point connecting with the Canadian Pacific Railway between Peterborough and Havelock.

Plans and specifications can be examined at the office of the Division Engineer of Construction, 118 King street west, Toronto.

The lowest or any tender not necessarily accepted.

J. W. LEONARD, President,
Toronto, Ont.

Young English Draughtsman (23) desires appointment, working and detail drawings. Please state salary. Draughtsman, care LARGE, 301 Queen Street, Toronto.

RIVER AUX RAISIN BRIDGES

Sealed tenders, marked "Tenders for Bridge Substructures," will be received by John Mullin, Esq., Clerk of Cornwall Township, Cornwall Centre, Ont, until 12 o'clock, noon, of MONDAY, JULY 16TH, next, for making the necessary excavation for piers, grading approaches, rip rapping same, construction of wing fences and building four re-inforced concrete and four ordinary concrete piers for the following bridges to cross the River Aux Raisin in the Township of Cornwall:

Moulinette Road Bridge, between Lots 30 and 31.
Mille Roches Road Bridge, between Lots 24 and 25.
McGillis' Bridge, on forced road near the foot of McGillis' Rapids.
St. Andrews Bridge, between Lots 12 and 13.

Plans, specifications, etc., may be seen at the office of John Mullin, Esq., Township Clerk, or at the office of Magwood & Walker, Civil Engineers, Colquhoun Block, Cornwall.

(Signed), W. H. MAGWOOD,
Civil Engineer in Charge.

Cornwall, June 20th, 1906.

CITY OF MEDICINE HAT

TENDERS

For the supplying of the following plant and materials will be received at the office of the Secretary Treasurer up to 4 p.m. JULY 21ST, 1906:

GAS SUPPLIES.

3,350 ft. of 2½ inch black iron pipe; 8,350 ft. of 4 inch pipe; 2,500 ft. of 3 inch pipe; One 2½ inch off 4 inch 45°y; One 3 inch off 3 inch 45°y; Six 4 inch off 4 inch 45°y T's; Five 3 inch off 4 T's; Six 2½ inch off 2½ inch T's; Two 4 inch to 3 inch reducers; One 6 inch regulator with 2½ inch inlet, 4 inch outlet and automatic cut off; Two 2½ inch brass globe valves; Three 4 inch iron globe valves.

WATER SUPPLIES.

9,200 feet of 6 inch pipe tested to 150 lbs. pressure per square inch; 1,600 feet of 10 inch pipe tested to 150 lbs. pressure per square inch; Forty 6 inch valves; Thirteen fire hydrants; 1,250 lbs. of lead; Twenty eight 6 inch T's; Four 6 inch 45°y's; Three ⅛ bends 6 inch; Four 6 inch off 10 inch crosses; One 10 inch 45°y; One ⅛ bend 10 inch; One 6 inch cross; One reducer 10 inch to 6 inch; Four 10 inch sleeves; Twelve 6 inch sleeves.

Tenders will be received for both wood and cast iron pipe and also for specials, hydrants and valves to suit, wood or iron pipe.

A circular stand pipe to contain 500,000 gal. about 70 ft. high erected complete upon foundation to be supplied by the city.

Two mechanical filters having a capacity of 500,000 gal. each in 24 hours delivered F.O.B. cars here with the superintendence of erection.

Full description of plans and specifications of the Stand Pipe and Filters must accompany each tender.

All information required will be supplied by the City Engineer.

The lowest or any tender not necessarily accepted.

WM. P. MORRISON.

Medicine Hat, June 21st, 1906.

Sova & Barbour, plumbers have opened a business in Winnipeg.

[FOR ADDITIONAL ADVERTISEMENTS FOR TENDERS SEE NEXT PAGE.]

TOWN OF OWEN SOUND
DEBENTURES

Sealed tenders, addressed to the undersigned, will be received up to 3 o'clock p.m. on FRIDAY, JULY 20TH, 1906, for the following Debentures:

$45,000—Twenty years, 4%, for Gas Plant;
$45,000—Twenty years, 4%, for Electric Light Plant;
$12,500—Twenty years, 4%, for Construction of Bridge;
$10,000—Ten years, 4%, for Collegiate Institute Building.

Tenders will be received for the whole or any part.

No tender necessarily accepted,

A. J. SPENCER,
Town Treasurer.

Owen Sound, June 14th, 1906.

AUCTION SALE
of
Valuable Brick Yard and Plant at La Riviere

Under and by virtue of the powers contained in certain mortgages, which will be produced at the time of sale, there will be offered for sale by public auction on

Friday, the Twentieth Day of July, A.D. 1906

AT THE HOUR OF 2.30 O'CLOCK IN THE AFTERNOON

at the offices of the Pressed Brick and Tile Company, Limited, at

LA RIVIERE, IN THE PROVINCE OF MANITOBA,

by MICHAEL CONWAY, Auctioneer, the following property, namely:

THE WORKS OF THE PRESSED BRICK AND TILE COMPANY, LIMITED, AT LA RIVIERE,

Aforesaid, being:

FIRST: The whole of Legal Subdivision Three (3) and the East Half of Legal Subdivision Six (6) of Section Thirty (30) in Township Three (3) in Range Nine (9) West of the Principle Meridian in Manitoba.

SECOND: in the Townsite of La Riviere in the Province of Manitoba and being composed of all that portion of Legal Subdivision Four (4) of Section Thirty (30) in Township Three (3) Range Nine (9) West of the Principal Meridan, described as follows: Commencing at a point on the Easterly Limit of said Legal Subdivision Four (4) distant two hundred and eighty-seven and two tenths (287.2) feet from the Northeast corner thereof; thence West sixty-one and eight-tenths (61.8) feet, said Easterly Limit of Legal Subdivision Four (4) being assumed due North; thence fifty-one degrees and fifteen minutes [51° 15' W] West to a point distant perpendicularly Southerly Sixty-six Feet from the Southerly Limit of "Station Grounds" as same are shown on a plan of subdivision of part of said Section and other lands registered in the Registry Office for the County of Rock Lake as No. 61; thence Southwesterly parallel with said Southerly limit of "Station Grounds" to a point distant perpendicularly Westerly three hundred [300] feet from the Easterly limit of legal subdivision Four [4] aforesaid; thence South parallel with said Easterly limit of legal subdivision Four to the Southerly limit thereof; thence Easterly along the Southerly limit of legal subdivision Four to the Southeast corner thereof; thence North along the Easterly limit of legal subdivision Four to the place of beginning, containing eight and three-tenth acres, more or less, together with all buildings and erections thereon, and the

Plant, Machinery, Tools, and Other Chattels of the Said Company.

The vendors are informed that the lands of the said Company comprise about Sixty (60) acres and include a very large supply of shale suitable for making buff and red pressed brick, and that there is a spur track on the said property leading from the Canadian Pacific Railway, and that there are the following buildings on the said property, namely: Frame engine and boiler room and extension, 1 large brick drier, frame engine and blower room, 9 circular brick kilns, 1 large dwelling house and 1 small dwelling house.

The premises of the said Company are situated close to the C. P. R. Station at La Riviere.

The vendors are informed that the machinery consists of 1 Boyd Press, 1 Williams Pulverizer, 1 Jeffries Conveyor, 1 Screen (Dunlap Perfect), 1 Extra Set Plates, 1 Set Fine Screws, 1 Blower and Engine, 1 Compound Engine, 1 Boiler, 1 Fan, 1 Steam Pump and Heater, 1 Grinding Machine, 4 Emery Wheels, 1 Screw Press and Dies. The tools are said to form a complete complement requisite for the operation of machinery and brick yard. There is also said to be a stock of about twenty-five tons of coal on the premises.

The vendors are informed that all buildings, machinery and tools, etc., are comparatively new and in good condition.

The above property and chattels will be offered for sale en bloc, subject to a reserve bid.

TERMS: Twenty per cent. of the purchase money to be paid down at the time of sale, balance to be paid in thirty days.

For further particulars apply to

NATIONAL TRUST COMPANY, Limited,
Winnipeg, Manitoba, Vendors.

Or to MESSRS TUPPER, PHIPPEN, TUPPER, MINTY & McTAVISH.

Solicitors, Winnipeg, Solicitors for the Vendors.

Dated at Winnipeg this 26th day of June, A.D. 1906.

CONTRACTS OPEN.

VAGREVILLE, ALTA.—A hospital is to be built here, cost $6,000.

ARDEN, MAN. — Local capitalists will build a hotel to cost $10,000.

OKOTOKS, ALTA.—The Methodist congregation have decided to build a new church.

STEELTON, ONT.—A by-law to install a system of waterworks has been carried.

TREHERNE, SASK.—A by-law has been carried to raise $18,000 for school building.

PARIS, ONT. — Tenders are being called by F. Hurndall for erection of a dwelling.

LONDON, ONT. — The plans for Bennett's new theatre have been prepared.

FORT ERIE, ONT. — B. F. Matthews will erect a fine building on Niagara street.

ROSTHERN, SASK.—A by-law will be votee on to raise $3,000 to install fire protection.

FERNIE, B.C.—A by-law has been passed to raise $5,500 for construction of sidewalks.

MACLEOD, ALTA. — Plans have been prepared for a residence for Mrs. R. Kennefic.

VERNON, B. C.—The by-law to have the waterworks system extended has been carried.

OWEN SOUND, ONT.—Wilcox's millinery store will be extensively enlarged this summer.

CARBERRY, MAN.—R. A. Garland has taken tenders for erection of an electric power house.

CHESLEY, ONT.—The Council is considering plans for the installation of a system of waterworks.

EXETER, ONT.—The Council will submit a by-law to loan $10,000 to the new canning company.

INGERSOLL, ONT.—A by-law to loan $20,000 to T. Waterhouse & Company has been carried.

NEW LISKEARD, ONT.—A by-law to raise $64,000 to install a water works system has been carried.

OSHAWA, ONT.—Tenders will soon be called for the replacing of Mill street bridge with concrete abutments and steel span.

ROACH'S POINT, ONT. — The Dominion Parliament has granted $3,200 for building a wharf here.

DALHOUSIE, N.B.—The Dominion Parliament have appropriated $11,500 for harbor improvements.

MISPEC, N.B.—The Dominion Parliament have appropriated $6,000 for extension to the breakwater.

BEAMSVILLE, ONT. — The ratepayers have decided to issue $7,000 local improvement debentures.

QU'APPELLE, SASK. — The Presbyterian congregation are considering the erection of a new church.

GUELPH, ONT.—Mrs. Barker will build a two-storey dwelling corner of Liverpool and Arnold streets.

GLACE BAY, N.S.—The Mira Brick Company have decided to make extensive improvements in their plant.

WALSH, ONT.—N. G. Wilson will receive tenders up to July 10th for construction of an Agricultural building.

SARNIA, ONT.—The King Milling Company will receive tenders up to July 4th for brick addition to their saw mill.

GRAND FALLS, N.B.—The by-law to install a system of waterworks has been passed. Tenders will soon be called.

CARDSTON, ALTA.—The by-law to raise $30,000 for construction of water works and electric light system has been carried.

PEMBROKE, ONT. — The Town Council gives notice of its intention to construct sidewalks on Esther and Agnes streets.

FAIRVILLE, N.B. — G. Murdoch, engineer, has prepared plans for a sewerage system for this village of about $24,000.

WELLAND, ONT.—J. A. Harrick, architect, Philadelphia, has planned the new factory building for the Ontario Iron & Steel Co.

HARRISTON, ONT.—W. D. McLellan, Township Clerk, will receive tenders up to July 12th for $1,000 school debentures.

KELOWNA, B. C. — R. Morrison, City Clerk, is asking for tenders for the purchase of $5,000 5 per cent. municipal debentures.

NANAIMO, B.C. — The Hamilton Powder Company have purchased ninety acres of land to make room for an enlarged plant.

FORT WILLIAM, ONT.—Snelgrove & Waddington are preparing to erect a large three storey business block on Victoria avenue.

NORTH TORONTO, ONT.—Tenders will be invited for building sidewalks on London, Beresford, Earl, Glen Grove and Yonge streets.

HARROW, ONT.— Clark & Company have plans for their new brick block prepared, and tenders for its construction will soon be called.

PARRY SOUND, ONT. — T. H. Tully will build a residence on Gibson street.—J. A. Johnston is preparing to erect a new residence.

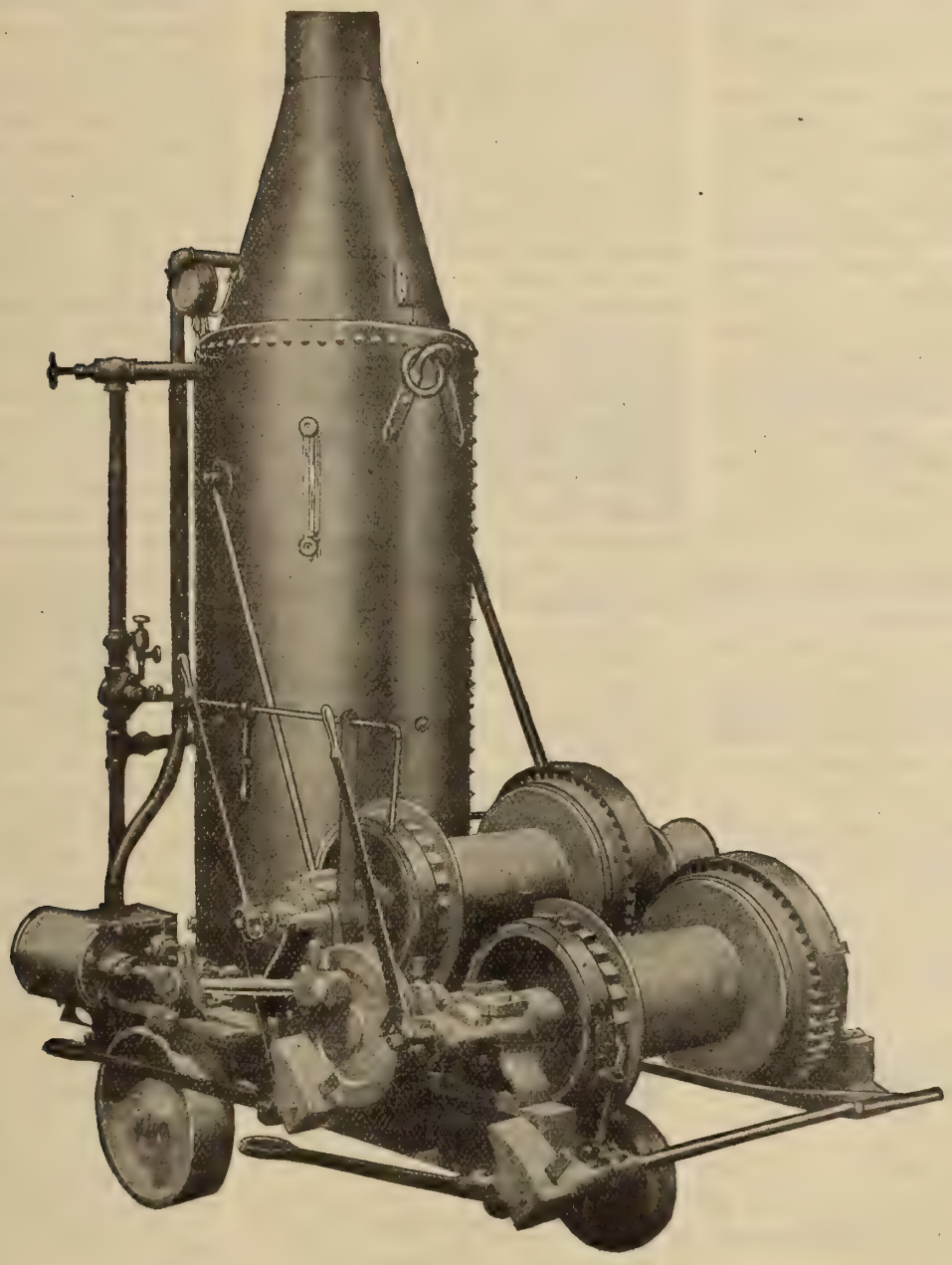
CORNWALL, ONT. — A by-law to grant $20,000 to the Modern Bedstead Co., Sherbrooke, to establish a factory here, has been carried.

PORT ELGIN, ONT.—R. Munro, village clerk, will receive tenders up to July 24th for construction of system of waterworks for the town.

BOUCK'S HILL, ONT. — George Lane will receive tenders up to July 16th for $802.82 4½ per cent. township of Williamsburg debentures.

CONTRACTORS' HOISTS

Standard Outfits or Special Designs



Derrick Irons and Fittings
Clam Shell and Orange Peel Buckets
Concrete Buckets, Stone Skips,
Wire Rope, Etc.

W. H. C. MUSSEN & CO.

Railway, Mining and Contractors' Supplies

MONTREAL

HALIFAX, N.S.—R. J. Wilson has taken tenders for alterations to Morris street school building, and for installing a system of hot water heating.

MILTON, ONT.—W. I. Dick, will receive tenders up to July 16th for installation of a steam heating and ventilating system in the public school.

WOODSTOCK, ONT.—R. J. Young & Company, London, have bought the store occupied by Trotter & Callan which they will have extensively remodelled.

WINGHAM, ONT.—F. Gelinas Department of Public Works, Ottawa, will receive tenders up to July 6th for sidewalks, fencing, etc., of the post-office.

MONCTON, N.B. — E. Edington, City Engineer, will receive tenders up to July 6th for construction of pipe sewers on Brydges, Park and Gordon streets.

HARROW, ONT. — J. H. Brown, Township Treasurer, will receive tenders up to July 10th for $4,948.50 township of Colchester South, drainage debentures.

CARMAN, MAN.—A. Malcolmson is taking tenders for wood pipe, special castings and valves for wood pipe, cast-iron pipes, fire hydrants and gate valves.

LADYSMITH, B.C.—F. C. Gamble, Lands and Works Department, Victoria, has taken tenders for construction of a wharf and approach at Oyster Harbor.

PORT ARTHUR, ONT.—The property, corner South Water and Arthur streets has been purchased by a joint-stock company for a large hotel building.

NAPANEE, ONT.—W. G. Wilson, county clerk, will receive tenders up to July 9th for building two abutments in connection with Brandon bridge on Selby road.

HARWICH, ONT.—G. Whittington will receive tenders up to July 4th for erection of school house at Mull. Plans with J. L. Wilson & Son, Chatham, architects.

OTTAWA, ONT. — A new foundry and machine works is to be built, corner Wellington and Lyon streets. Messrs. Finnie, Maclaren and others are interested.

MELFORT, SASK.—W. G. Chisholm will receive tenders up to July 6th for erection of a dwelling house, store house and stable at the Kinistino Indian Reserve.

PINCHER CREEK, ALTA. — The citizens and the council propose granting a bonus of $10,000 to the McDonald, Dunlop Company of Calgary, to establish a mill here.

INDIAN HEAD, SASK. — O. J. Godfrey, town clerk, will receive tenders up to August 6th for the purchase of $149,985, five per cent. waterworks and electric light debentures.

NEEPAWA, ONT. — The town council gives notice of its intention to construct 12 ft. granolithic sidewalk on west side of Mountain avenue from Hamilton to Mill street.

ARNPRIOR, ONT.—M. D. Graham will receive tenders up to July 9th for construction of a heating and ventilating system in the public school, together with alterations and repairs.

MOOSE JAW, SASK.—The Moose Jaw Machine Works have decided to erect their new building this year.—The C.P.R. are negotiatins for land for the construction of a dam up the river.

DUAGH, ALTA. — F. G. Rickard will receive tenders up to July 8th for construction of a church at Astleyville. Plans at All Saints' school room, Edmonton, and with C. Brunifit, New Lennox.

STATHCONA, ALTA.—D. McLeod intends erecting a ten storey dwelling on Anderson street.—The Separate School Board purpose building a two storey school on Lumsden avenue, cost $9,000.

CREWSON'S CORNERS, ONT.—F. S. Near, Ballinafad, and A. McKinnon, Hillsburg, are taking tenders for two bridges, one at this place, the other on sixth concession boundary, Erin and Esquesing townships.

CALGARY, ALTA. — The Alberta Biscuit Company have taken tenders for the erection of a new factory, corner Fourth and Ninth avenues. — R. C. Thomas intends building an implement warehouse cost $5,000.

SINTALUTA, SASK.—V. W. Horwood, architect, Winnipeg, will receive tenders up to July 5th for erection of a four roomed brick and stone school building. Tenders also received by G. G. Barber, Secretary-Treasurer.

WEYBURN, SASK. — The Town Council have purchased a site on Main street for municipal buildings. — The Methodist and Presbyterian congregation purpose building new churches.

VICTORIA, B. C.—W. T. Leighton, of Winnipeg, has purchased a site on Cadboro Bay road for a residence.—Pither & Leiser have purchased site corner Fort and Wharf streets for four-storey office and warehouse building.

CULLODEN, N.S.—F. Gelinas, Department of Public Works, Ottawa, will receive tenders up to July 20th for construction of a breakwater here. Plans at the Department and with E. G. Millidge, Antigonish, C. E. W. Dodwell, Halifax, and Postmaster here.

CHATHAM, ONT. — W. D. A. Ross has taken tenders for erection of a building for Chatham Fruit Growers' Association.—P. S. Coate will receive tenders up to July 7th for erection of additions to Chatham Gas and Electric Light plant. Plans with J. L. Wilson & Son, architects.

POIRIERVILLE, N.S.—F. Gelinas. Department of Public Works, Ottawa, will receive tenders up to July 21st, for construction of a wharf here. Plans at the Department and at offices of C.E.W. Dodwell, Halifax, E. G. Millidge, Antigonish, N.S., and with postmaster at Richmond, N.S.

PORT COLBORNE, ONT.—L. E. J. Hopkins will receive tenders up to July 7th for erection of a Guild Hall here. Plans at St. James Rectory.—L.K. Jones, Department of Railways and Canals, will receive tenders up to July 5th for placing stone protection along summit level of the Welland canal between this town and Thorold.

BELLEVILLE, ONT.—Lt. Col. A. A. Farley, Hotel Quinte, has taken tenders for repairing dwelling corner Bridge street and Bleecker avenue.—Belleville B. & A. Association will receive tenders up to July 4th for erection of Exhibition Building at the Driving Park.—The city propose the issue of $25,000 debentures for extension and improvement to the gas plant.

ST. JOHN, N.B.—H. C. Stone, architect, Montreal, has prepared plans for the new Royal Bank building, corner King and Canterbury streets, five storeys, concrete and iron construction. — The Dominion Parliament in their supplementary estimates appropriated $13,000 for additions to the Military Buildings, also $15,000 for improvements on the Quarantine Station.

TORONTO JUNCTION, ONT. — W. J. Conron will receive tenders up to July 5th for block paving on Keele street north.—Building permits have been issued as follows: S. E. Jewett, three 2-story brick dwellings, Kingsley avenue, cost $1,400 each; Kerr Company, brick factory, Pelham avenue, cost $1,500; J. B. M. Rose, four 2-story cement and brick dwellings, Annette street, cost $1,300 each.

BRANTFORD, ONT.—G. W. Hall, architect, will receive tenders up to July 9th, for erection of school building on Darling street.—The following building permits have been issued: G. Benwell, alterations to Benwell hotel, Marlet street, cost $2,600; additions and alterations to Huron street school, cost $15,000.—A. C. Tresham will build a brick dwelling on West Mill street.

QUEBEC, QUE.—The following building permits have been issued: Francis Parent, building corner Durocher and Franklin streets, cost $2,500; A. Turgeon, repairs to property, Rigauville, street, cost $1,500; Boswell Bros., building corner Bridge and Queen streets, cost $2,500; M. Cauchon, repairs to building, St. John street, cost $1,300; P. A. Lamonde, repairs to building on St. Joseph street, cost $1,200.

EDMONTON, ALTA.—C. B. Beals, of Kelly & Beals, will build a brick residence on Fifth street.—H. N. Lovatt will build a residence on Jasper avenue east.—The City Council have ratified the plans for the sewer to be built at a cost of $300,000.—The Board of Directors of the Y. M. C. A. have instructed the architect to proceed with the plans in detail of their building.—The following building permits have been issued: C.M. Watts, building, Third street; J. Mitchell, dwelling, Ottawa street; G. Hutton, warehouse, Howard street.—G. J. Kinnaird will receive tenders up to July 9th for construction of six miles of concrete and pipe sewers, and laying of about four miles of water pipe. Plans at City Engineer's office.

HAMILTON, ONT.—J. R. Allen, is receiving tenders this week for additions to Trolley street school.—The Hamilton club are considering making important changes in their club house corner James and Main streets.—The Frontier Realty Co. purpose erecting fifty houses at Kenilworth opposite the Jockey Club grounds.—G. E. Bristol has purchased a site on King street for a large warehouse. —It is expected that arrangement will soon be made with the Cataract Power Co. by which the new terminal station will be built here.— Buntin, Gillies & Company will soon begin the construction of their four storey building, corner Jackson and John street.

WINNIPEG, MAN. — D. Smith, architect, has prepared plans for a foundry on Alexander street, cost $38,000.—Same architect has prepared plans for three stores on Main street for A. P. Crump.—Nares, Robinson & Black, real estate brokers, have sold the Hotel du Canada, on Lombard street, which it is said will be replaced by a modern business block.— Stevenson & Paterson, architects, have prepared plans for the new abattoir on Fonseca street, cost $20,000.—F. R. Evans, architect, is receiving tenders this week for erection of a brick veneer church on Burrows avenue, for Tabernacle Baptist congregation.—J. H. G. Russell, architect, has taken tenders for erection of a residence on Stradbrook place, for J. D. Clark. The same architect, has taken tenders for erection of a warehouse on Lombard street for Crain, Ordway & Co. —The by-law has been carried to provide $3,000,000 for installation of civic power plant.

MONTREAL, QUE.—The plans of Edward & W. S. Maxwell, architects, for a new building for the Church of the Messiah on Sherbrooke street have been accepted, cost about $70,000. — The Finance Committee have made appropriations for plans to remodel the water supply system.—The Council gives notice of its intention to construct sewers in Albert, Amity, Bourgeois, Carriere, Cardinal, Chausse, Davidson, Dufferin, Joliette, Resther, St. Dominique, St.

Germaine and St. Norbert streets, Cote des Neiges road, Lincoln, Laurier and Sherbrooke avenues.—Building permits have been issued as follows: Munderloh & Co., four-storey brick and stone building, Jurors street, cost $20,000; J. Duclas, two dwellings, Richelieu street, cost $6,000; E. St. Piere, two dwellings, Annie street, cost $6,000; N. Deslauries, two dwellings, St. Denis street, cost $6,000; J. B. Bailargrow, warehouse, St. Urban streets, cost $7,000; Hicks & Co., two houses, Metcalfe street, $20,000; S. Robertson, skating rink, Grey street, cost $15,000; P. Dausevaux, four dwellings, Dufresne street, cost $12,000.—The G.T.R. have definitely decided to erect at once a ten storey building corner McGill street and Youville Square.

VANCOUVER, B. C.—Saunders & Lawton, architects, have taken tenders for a four-storey and basement, store and apartment building corner Granville and Robson streets.—The Vancouver Flour Mills Limited, expect to soon begin their new mill, cost $100,000. A 200,000 bushel elevator will also be erected, cost $50,000.—W. Walsh will build a three-storey block on Pender street, cost $30,000.—Grant & Henderson, architects, have prepared plans for a block for Dr. N. Drier on Pender street, cost $12,000.—E. Plumb has purchased the Golden Gate Hotel which he will have extensively remodelled.—The Colonial Hotel, on Granville street, will be remodelled.—Tenders have been taken for the erection of a brick block on Carroll street for the Vancouver-Shanghai Land Company.—Grant & Henderson, architects, will receive tenders up to July 4th for additions to St. Andrew's church, corner Georgia and Richards streets.—The following building permits have been issued: E. E. Lipsett, building on Water street, cost $10,000; W. R. McLeod, residence, Sixth avenue, cost $1,400; James Hay, three dwellings on Seventh avenue, cost $4,200; T. M. Robertson, residence on Beech avenue, cost $1,500; S. Bealey, residence on Pender street, cost $1,500; Chin Wan Chong, building on West avenue, cost $3,000; J. Bennett, residence on Seventh avenue, cost $2,000.

TORONTO, ONT.—The plans of N. B. McGiffin, architect, for St. Cyprian's church building, corner Manning and Follis avenues, have been adopted, cost $16,000.—Tenders are taken at 50 Austin avenue for building a summer cottage.—The plans for the Sea Wall from the new fort to Spadina avenue have been prepared, cost $75,000.—Plans are being prepared for the new Riverdale High School, cost about $47,000.—At a recent meeting of the members of the City Engineer's and City Solicitor's departments and Board of Control it was decided to proceed as rapidly as possible with the erection of the Yonge street bridge.—A. R. Williamson purposes erecting a three-storey apartment house corner Grange avenue and Esther streets, cost $15,000.—The city gives notice of its intention to construct asphalt pavement on Bond street from Queen to Gould, cost $14,858; Gerrard street

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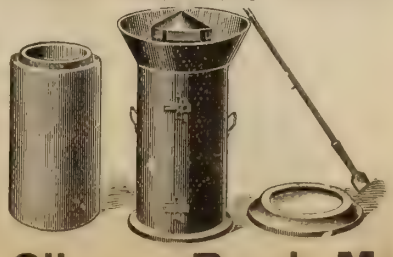
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from Yonge to Elizabeth, cost $5,964; Albert street, from Teraulay to Chestnut, cost $6,461; Ann street, from Yonge to Mutual, $7,290; St. Vincent street, from Grenville to St. Joseph, cost $9,292; Hayter street, from Yonge to Chestnut, cost $8,531; Mutual street, from Queen to Wilton avenue, cost $8,814; McGill street, from Yonge to Mutual, cost $7,265, and several others, also sewers and concrete sidewalks.—The City Engineer has recommended the following permanent pavements: Asphalt — Salem avenue from Dovercourt Park to Bloor street, $9,590; Gould street from Yonge to Victoria, $3,719; Gordon street from Sheridan avenue to Dufferin $2,770; Adelaide street from Spadina avenue to York $17,212; Richmond street from Bay to Victoria, $3.493; Marion street from Lansdowne to MacDoneld avenne, $1,397; Asphalt Block — Temperance street from Bay to Yonge, $10,283; West Market street from Fronr to King, $6,583; Asphalt — Gould street from west side of Victoria to Mutual, $9,045; Gore street from Clinton to west end, $1,624; Grace street from 994 feet north of north-east corner of College ann Grace to 500 feet further north, $2,554; Palmerston avenue from Bloor street to Seaton square, $4,212; Bloor street from Lansdowne avenue to Dundas street, $20,778; Wilton avenue from Parliament to River, $13,274.—The Coronation Hotel, corner King & Church streets, will in future be managed by W. Krausmann, who will have extensive alterations made in the building. — The building of the new Metnodist church, corner Queen street and Bellefair avenue, will begin at an early date.—Tenders are invited by W. Brand, 728 Spadina avenue, until July 8th for brick and stonework for a house on Bloor street.—Stewart Hartshorn Co. will soon begin erection of a warehouse on River street, cost $15,000.—The by-laws have been carried to provide for building Lansdowne avenue subway, cost $100,000 and for reclamation of Ashbridge's Marsh, cost $200,000.

CONTRACTS AWARDED.

PARRY SOUND, ONT.—Erection of jailer's residence: W. Clubb, contractor.

LETHBRIDGE, ALTA. — C.P.R. roundhouse: Mr. McDiarmid, contractor.

VICTORIA, B.C.—Residence at Shawinigan lake, for C. K. Magill: D. H. Bale, contractor.

BOISEVAIN, MAN. — $10,000 5 per cent. debentures: National Trust Co., Winnipeg, purchasers.

FORT WILLIAM, ONT.—Warehouse for J. W. Griffin Company, of Winnipeg: Russell Bros., contractors.

MILTON, ONT.—Silex walks in town: Pettypiece Silex Stone Co., Amherstburg, contractors, at 14 cents a foot.

BRANTFORD, ONT. — Erection of screw factory at West Brantford: Schultz Bros., contractors, cost about $19,000.

ROSTHERN, SASK. — New building on Railway street for J. Janzen: S. A. Covert, Ponoka, contractor, cost $10,000.

WINGHAM, ONT.—Kelsey system of warming and ventilating in the High school: James Smart Manufacturing Co., Brockville.

SASKATOON, SASK. — Rectory for St. John's church: J. R. Coulter, contractor, $2,300; electric wiring, O. S. Lemery.

TAVISTOCK, ONT.—Construction of Wilhelm and Erb drains in township of South Easthope: James Wellwood & Co., contractors.

WINNIPEG, MAN. — Supply and erection of structural steel for train shed of G.T.R.: Dominion Bridge Company, Montreal, contractors.

KINGSVILLE, ONT.—The Pettypiece Silex Stone Co., of Amherstburg, have contracted for all the extra cement beds, etc., for the electric railway power house here.

VANCOUVER, B.C.—Hotel building corner Burrard and Georgia streets for B. T. Rogers: F. Hewett, contractor, cost $30,000. Grant & Henderson, architects.

CASTLETON, ONT. — The James Smart Manufacturing Co., Brockville, have received the contract for placing Kelsey system of warming and ventilating in Public school.

OTTAWA, ONT. — 65,000 tons steel rails for two sections of the National Transcontinental Railway: Dominion Iron & Steel Co., Sydney, N.S., and Lake Superior Consolidated Co., Sault Ste. Marie, Ont.

HALIFAX, N. S. — Improvement of heating system for City Hall: Longard Bros., contractors, to cost $1,468.—50,000 tons of 60 lb. rails for MacKenzie & Mann Railway Systems east and west: Dominion Iron & Steel Co., Sydney, N.S.

LONDON, ONT.—Kelsey system of warming and ventilating in Empress avenue Methodist church: James Smart Manufacturing Co., Brockville, contractors.—Construction of Sylvan bridge over the Sauble river: Concrete work, R. Waltham, of Kerwood, for $1,300; steel work, Hamilton Bridge Works for $2,450.

OWEN SOUND, ONT.—The Light & Power Committee recommended the acceptance of the tender of Robb Engineering Co., of Amherst, N.S., for one horizontal cross compound condensing Robb-Armstrong Corliss engine with fittings, cost $7,591 and the tender of Reid & Kilmer, Toronto, for one revolving field alternating current generator 375 k.w. with all attachments. — Electrical Supplies: Charles Kilmer, Walkerton, contractor, cost $7,000.

FIRES.

The large Cathedral, convent and other buildings at Nicolet, Que., loss $600,000. —The mill of the Chicoutimi Pulp Co., at Chicoutimi, Que., damaged to extent of $20,000.—Buildings of the Munro-McIntosh Carriage Company, at Alexandria, Ont., damage $40,000.—Sixteen houses on Coady road, Sandon, B. C., loss $12,000.—Central Presbyterian church, corner Jackson and McNab streets, Hamilton, completely gutted.

BUILDING IN REGINA.

The building permits issued for Regina up to May 31st, of this year amounted to over three-quarters of a million dollars. The approximate value of building permits issued during the month of May alone totalled $337,600.

Alfred G. Gariepy and Simeon Hamelin, contractors, Montreal, have registered their business under the name of Hamelin & Gariepy.

Notice is given by the firm of Morley, Free & Cameron, contractors in the city of Moose Jaw, that their partnership has been dissolved.

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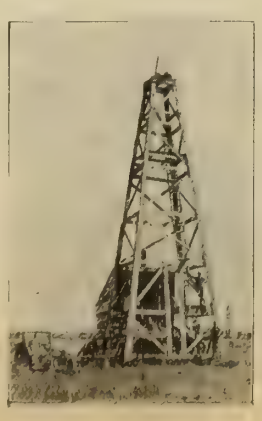

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ITEMIZED COST OF HAND-MIXED CONCRETE WORK.

Mr. Fred R. Charles, city engineer of Richmond, Ind., has compiled the following notes concerning the cost of five pieces of hand-mixed concrete work done by day labor under his charge as engineer and superintendent of construction.

The first work was the construction of an abutment and six river piers for a bridge over the Miami River at Fernald, Ont. The piers were put down with cofferdams. Sand and stone were secured close to the site, but the cement had to be teamed 10 miles. The concrete amounted to 1,542 cu. yd., and cost $6.30 a yard, made up as follows: Cement at $2.10 per barrel, $1.58; sand, 35 cents; stone, 75 cents; lumber, 64 cents; tools, 20 cents; total for materials, $3.52; pumping, 15 cents; labor at $1.75, $2.78.

The second work was the construction of two abutments, measuring 434 cu. yd., for the Ernst street viaduct in Cincinnati. The cost per cu. yd. was $6.08, itemized as follows: Cement, at $1.70, $1.48; sand, 64 cents; stone, $1; lumber, 40 cents; tools, 6 cents; total for materials, $3.58; excavating in rock and shale, $1.12; mixing and placing concrete, $1.13; building forms, 25 cents. Labor was paid $1.75 a day.

The third work was the construction of 570 cu. yd. of concrete in the pedestals of the Quebec avenue viaduct at Cincinnati. These measured 5 ft. square on top and were from 8 to 20 ft. high. Their location was very inconvenient for the delivery of materials, which was wholly team and wheelbarrow work. The total cost was $7.16 per cu. yd., itemized as follows: Cement, at $1.60 a barrel, $1.40; sand, 53 cents; stone, $1.84; lumber, 38 cents; tools, 5 cents; total for materials, $4.20; labor at $1.75 a day, $2.96

The fourth work was a pier, two abutments and some pedestals for a railroad viaduct in Cincinnati. The pier was 56 ft. high and a steam derrick was used in handling the concrete for it. On the remainder of the work all materials were teamed or wheeled. The total amount of concrete was 2,111 cu. yd., and its cost was $7.23 per cu. yd., itemized as follows: Cement, at $1.60, $1.44; sand, 50 cents; stone, $1.03; lumber, 54 cents; tools, 25 cents; water, 3 cents; total for materials, $3.79; labor at $1.75 a day, $3.44.

The last work was a reinforced concrete dam across the Whitewater river at Richmond, Ind. It measured 220 cubic yards. The footings were put in with the help of cofferdams and steam pumps. The cost was $5.58, itemized as follows: Cement at $1.60, $1,485; sand and gravel, 80 cents; lumber, 60.8 cents; tools, 44.5 cents; total for materials, $3,338; clearing and excavating, 96 cents; setting forms and mixing concrete, $1,007; pumping 27.5 cents.

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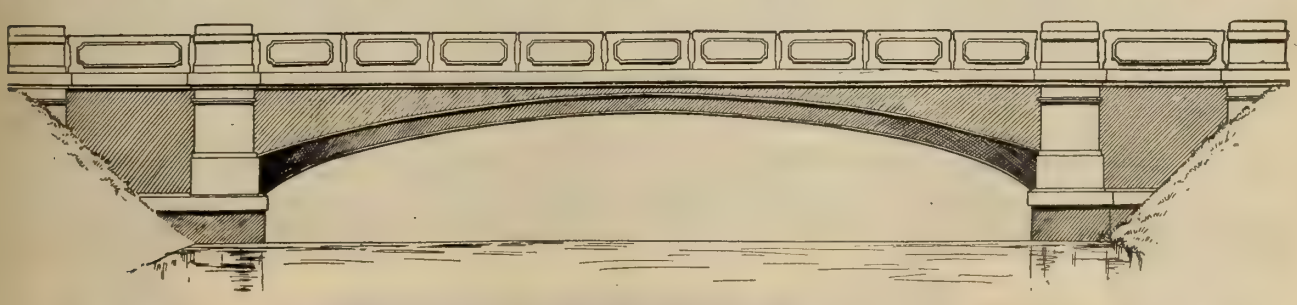

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THE MANUFACTURE AND USE OE CONCRETF PILES.

Mr. Henry Longcope, recently read a paper on this subject before the National Association of Cement users of the United States. After stating that he had, through the courtesy of Messrs. Constantine Schuman and Percy H. Watson, two well known engineers, been able to present for the consideration of the Convention a number of illustrations showing the manufacture of concrete piles, and the erection of buildings thereof, under the different methods, he went on to show that the matter of concrete piles and abutments was by no means a modern invention. That it was used by the prehistoric Race of Lake Dwellers which inhabited one portion of Europe. Piles were then driven with very crude instruments. The first method adapted to modern uses was the sand pile, produced by driving a wooden form in the ground and withdrawing the same; the hole was then filled with moist sand, well rammed. The next method was to drive a metal form into the ground and, after withdrawing, to fill the hole with concrete. This he maintained was not successful, because in withdrawing the form the ground would collapse before the concrete could be inserted. The next method that was introduced was that of dropping a cone shaped piece of metal weighing five tons, a number of times from a considerable height, in order to form a hole which was afterwards filled with concrete. This method never passed the experimental stage. Then the plan was devised to mold a pile, using concrete, sometimes reinforced. This pile, after perfectly hard, was driven in a similar manner as is now in vogue. While concrete piles made by this method were effective, yet they were open to several criticisms, such as difficulty in handling and the time wasted in waiting for the concrete to set hard. He said that while it seemed well nigh impossible to construct a form that will entirely resist the repeated blows of the hammer, the only solution was to build all the apparatus of such a rugged nature as to reduce the punishment to a minimum.

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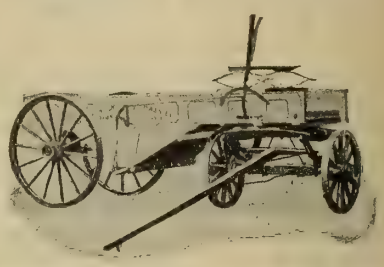

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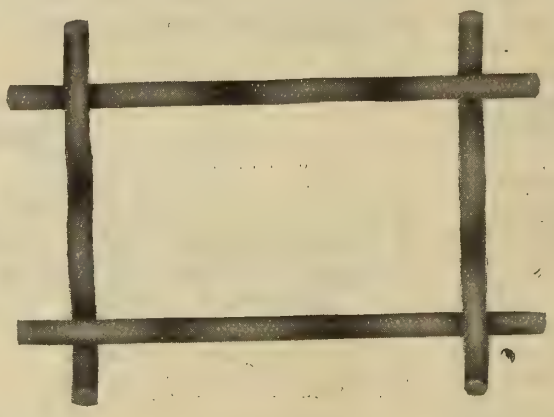

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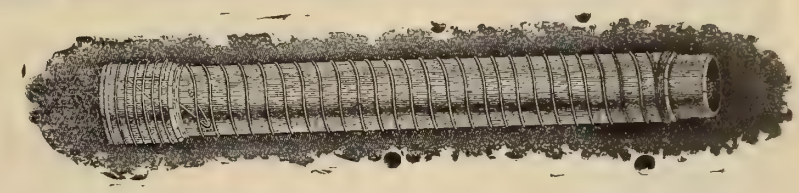

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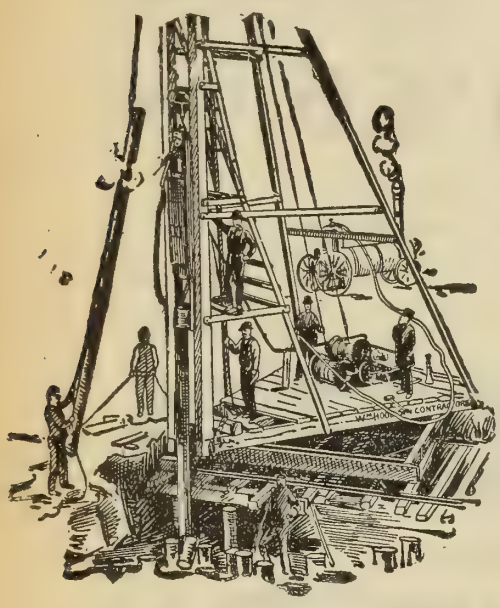

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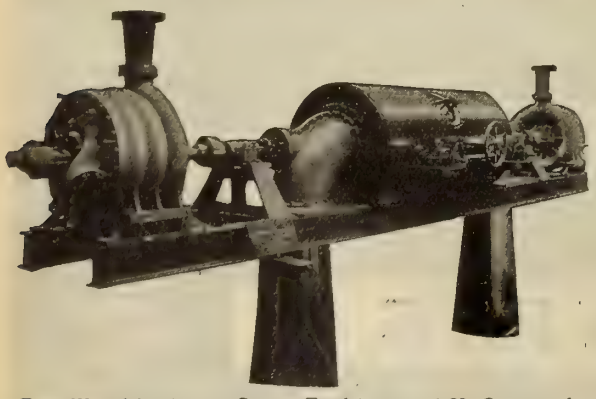

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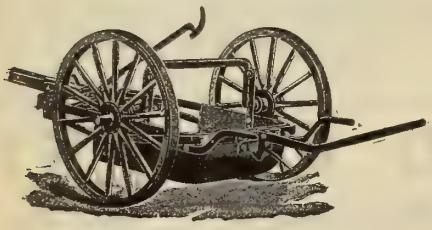

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BY

The City Engineer of Toronto for 1903-4

Note the High Grade of National. Compare it with others.

Year.	No Samples Tested.	Soundness Faiji Test.	Specific Gravity	Residue in Test on No. 100 Sieve	Setting Time in Minutes		Tensile Strength in pounds per square inch.									
							Neat.					3 (Sand) to 1 (Cement)				
					Initial	Final	1 dy.	7 dys.	28 dys.	3 mos.	1 yr.	1 dy.	7 dys.	28 dys.	3 mos.	1 yr.
1903	20	O.K.	3.135	2.1	162	345	307	701	783	827	*	74	214	299	367	*
1904	44	O.K.	3.150	2.0	132	342	300	744	848	914	938	86	262	354	401	427

* Tests for 1 year were not completed when records closed. 1905 report not yet issued.

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PERSONAL.

Mr. W. J. Bowers, C. E., chief assistant to Mr. John Galt, consulting engineer, Toronto, has gone to St. Johns, Newfoundland, to inspect the waterworks system now being constructed there from Mr. Galt's plans.

CORRECTION.

In last week's issue of the CONTRACT RECORD under the heading of Contracts Awarded, the Pettypiece Silex Stone Co., of Amherstburg were mentioned as the contractors for construction of silex walks in Collingwood. This should have been Sault Ste Marie.

FINDS IT VALUABLE.

The Pettypiece Silex Stone Co., Amherstburg, Ont., write: We consider the RECORD a very valuable journal. We have secured some very good contracts from being advertised in the RECORD and appreciate the journal very much.

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The Canadian McVicar Engine Company, of Galt, Ont., have taken over the factory formerly owned by the Galt Power & Gas Machine Company where they will manufacture gas and gasoline engines.

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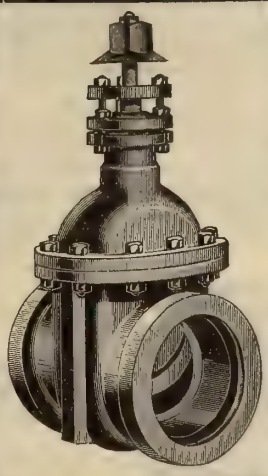

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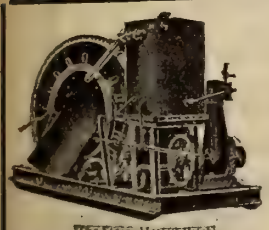
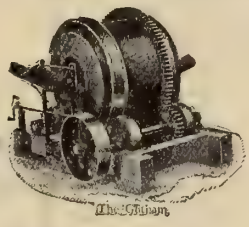
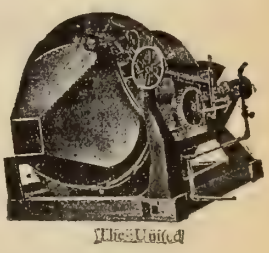

The Steam Heater Hatch

The Stanley

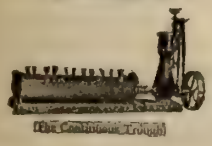
The International


The Gilman


The United

The Kershaw

The East First Cubic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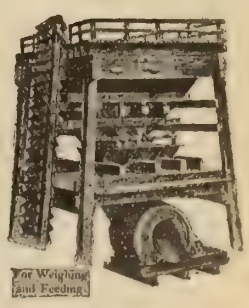
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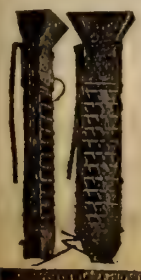

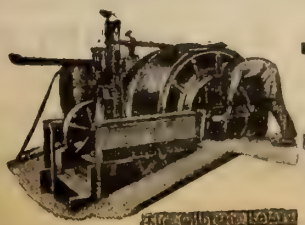

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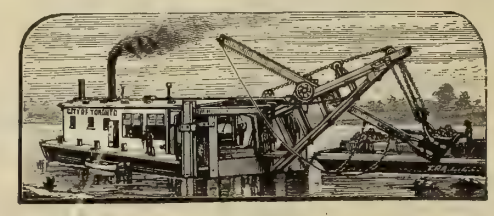

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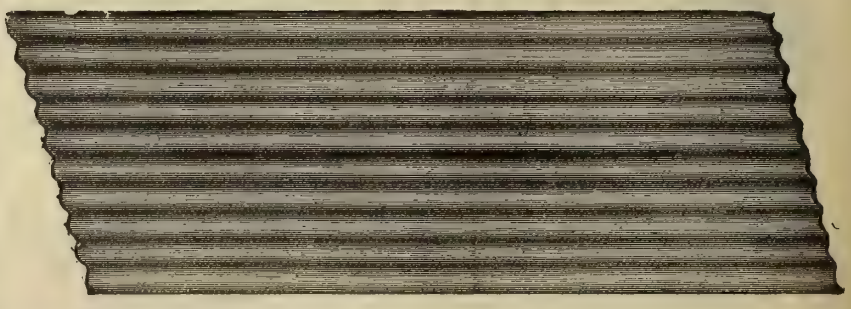

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PERSONAL.

Mr. Jacob Wright who is well known to the building and contracting business in Toronto, died at the residence of his son-in-law, Mr. T. Joliffe, 10 Rusholm Road, early in June. He had reached the advanced age of 85 years.

BUILDING IN EDMONTON.

The total of the estimated cost of buildings erected in Edmonton for the first five months of 1906 is $540,936. The cost of buildings erected in May are estimated at $151,946.

BUILDING IN CALGARY.

For the first five months of 1906 the estimated cost of buildings erected in Calgary was $655,365. The estimated cost of buildings in May were $195,757.

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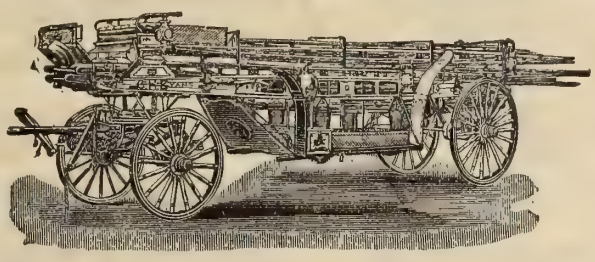

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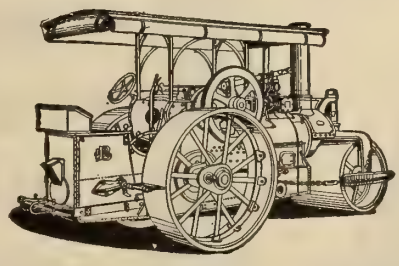

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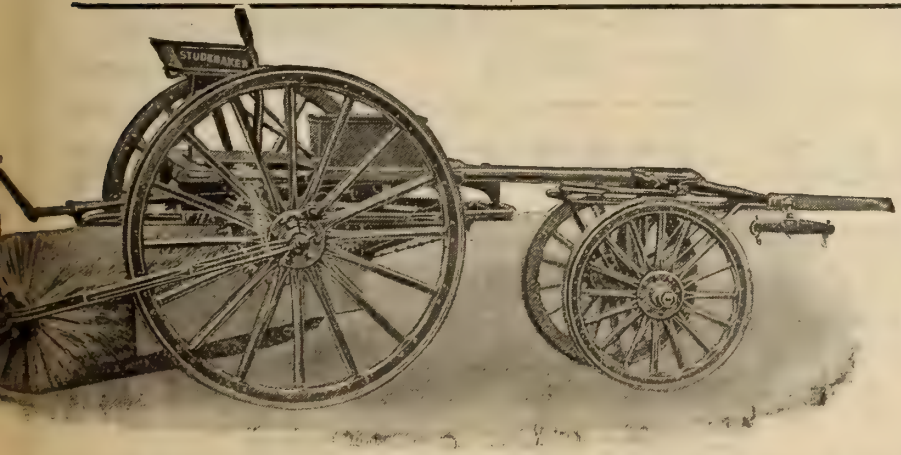

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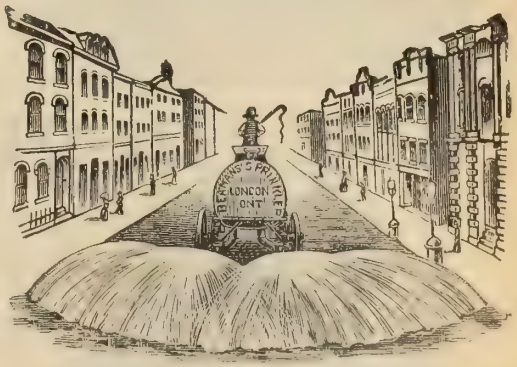
Because no sweeper so effectually does the work for which it is designed as "The Studebaker." It Sweeps Clean. No sweeper is constructed with the same degree of care and mechanical precision. It Wears Well. "The Studebaker" has the smallest number of working parts, and has less gearing than any other sweeper made. It is free from all unnecessary complications. With reasonable care it does not get out of order. Send for complete descriptive catalogue.



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Does not clog or get out of order. Greatest width of spray Can be graded from driver's seat to any volume.

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Portland Cast Stone Company Limited, Guelph, Ont., incorporated, capital $40,000. Directors, W. F. Colwill, T. J. Colwill and W. W. P. Colwill.

Gallagher Iron Mining Company, Limited, Sault Ste. Marie, Ont., incorporated, capital $500,000. Directors, F. P. Sullivan, J. J. Gallagher of Sault Ste. Marie, Mich., and F. H. Hughes, Sault Ste. Marie, Ont.

Peterboro & Chemong Auto-Car Company, Limited, Peterboro, Ont., incorporated, capital $5,000. Directors, I. Eastwood, A. Elliott and B. Lee.

Victoria Roller Rink Company, Limited, Toronto, Ont., incorporated, capital $40,000. Directors, J. A. Kammerer, H. L. Hees and W. A. Cotton.

North Ontario Reduction & Refining Company, Limited, Toronto, Ont., incorporated, capital $500,000. Directors, J. A. Young, H. B. Ritchie, J. J. Wright and others.

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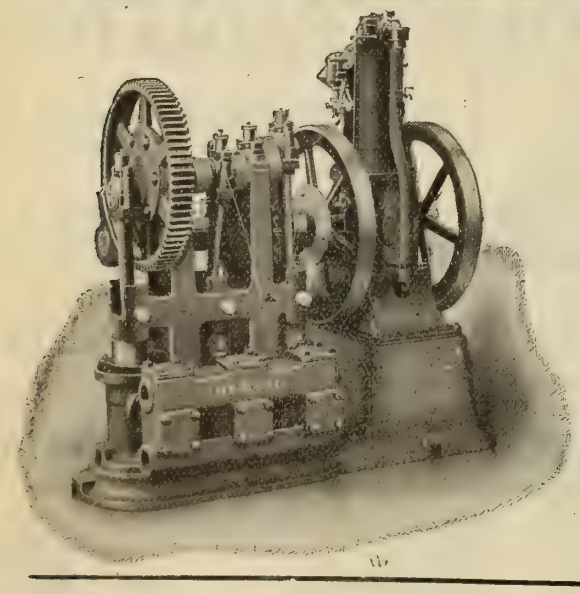
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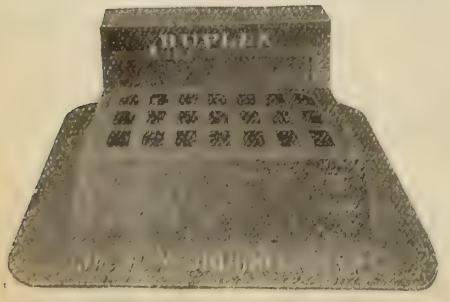
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Can be adjusted to different heights and is easily placed.
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But there are other reasons, reasons known to and admitted by the ENTIRE PROFESSION OF THE CIVIL ENGINEERS which make it more than twice. HADN'T you better ACQUAINT yourself with these reasons.

ANYBODY can say they have got the best road, but that don't make it so. WHAT REASON is there for the present DEPLORABLE SITUATION in paving affairs?

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Stone Crushers and Grinders
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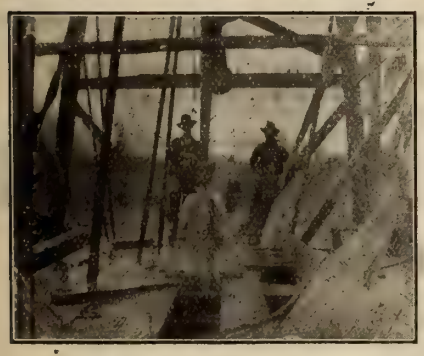

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High pressure pipe for Water Works Systems, irrigation power plants, etc. Sizes 2" to 24", half the cost of cast iron. Write for Catalogue.

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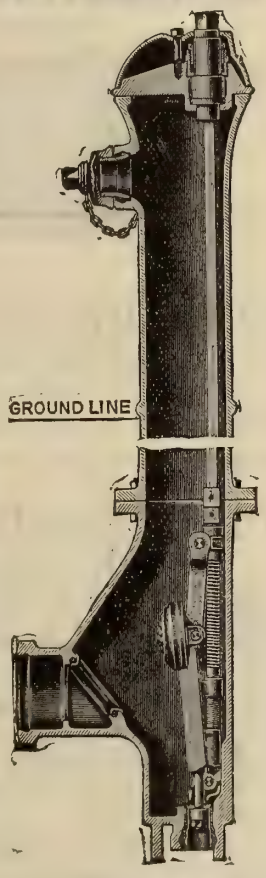

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Specifications Respectfully Solicited.

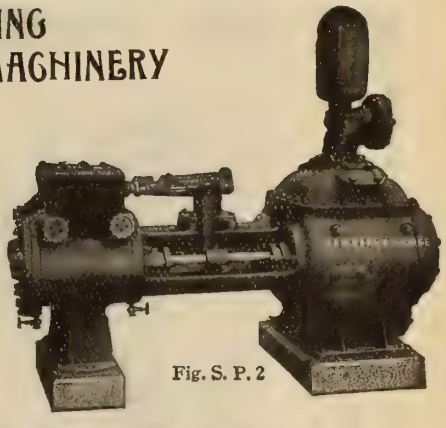

Fig. S. P. 2

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"RAVEN" PORTLAND CEMENT

— Unexcelled for Strength and Uniformity —

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For Corporations, Municipalities, Villages, Residences, Etc.
Sprinkler Systems a Specialty.

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Windmills, Pumps, Gasoline Engines, Hydraulic Engines, Etc.

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That is why we can do work CHEAPER, QUICKER, BETTER, than small contractors.

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PORTLAND CEMENT

For Immediate Delivery

The above Cement we fully guarantee to fulfill the requirements of Canadian and American Societies of Civil Engineers.

Large stock always carried at Fort William, Port Arthur and Duluth.

Telegraph, Telephone or write for prices.

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WESTERN REPRESENTATIVE, UNION BANK BUILDING

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REGINA STORAGE AND FORWARDING CO. — REGINA

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CAST IRON PIPE FOR WATER OR GAS

Special Castings,

Tees, Crosses, Flanges Pipe, Valves, Hydrants,

Stand Pipes, Valve Boxes, Drinking and Ornamental Fountains.

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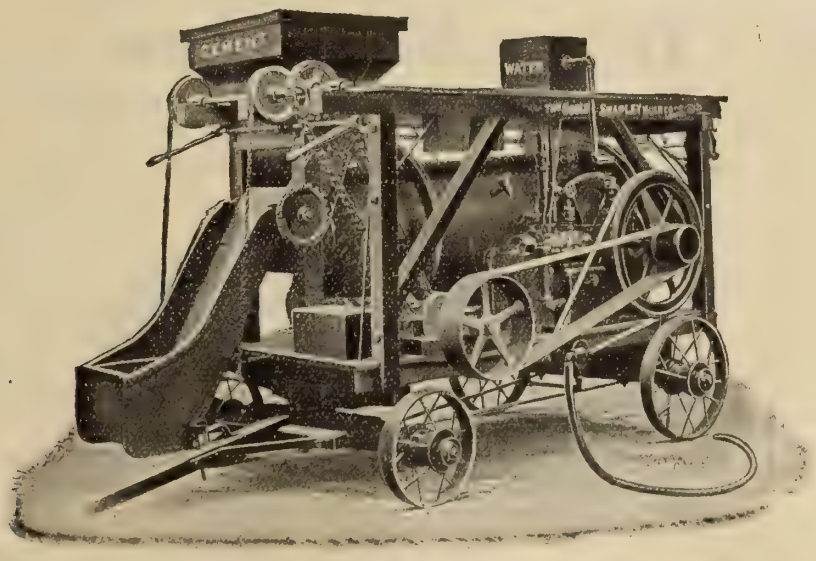
Ideal Automatic Concrete Mixers

The Only Successful Automatic Mixer Made



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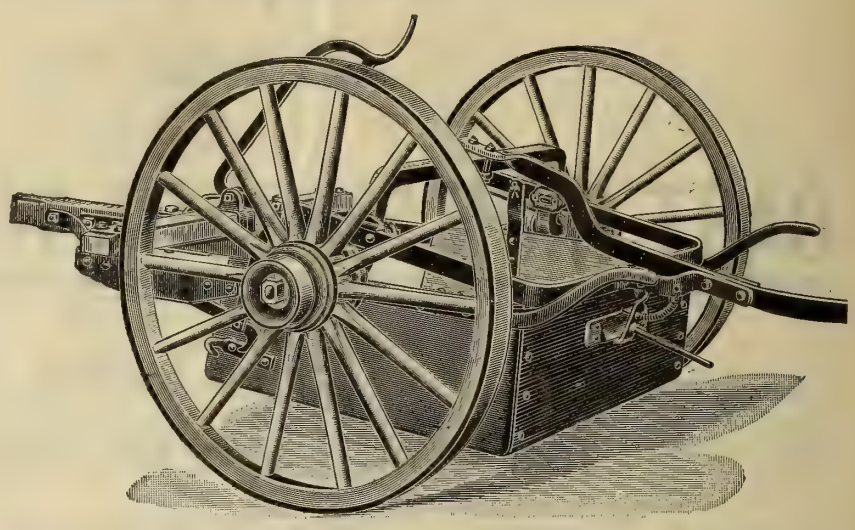
Wheel and Drag Scrapers

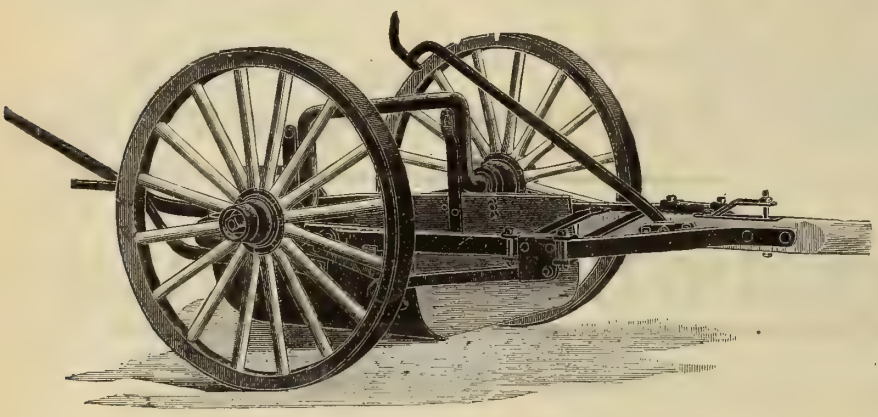
In Many Styles

ALL CAPACITIES IN STOCK - PRICES EXTREMELY LOW

Here we illustrate our **"GREAT WESTERN"** type **WHEELSCRAPER** which is especially adapted to grading work.

This style of scraper is most popular with all contractors and is highly recommended wherever used.





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Wheelscraper

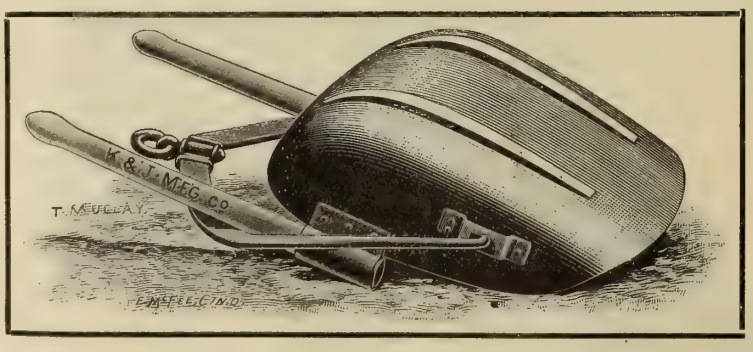
is high in favor.

This scraper is easy to operate and is acknowledged by all users to be the best, strongest and easiest working wheeler ever put on the market.

ALL CAPACITIES - Drag Scrapers - ALL STYLES

Our Drag Scrapers are made of the same high grade material as our wheelers, and any user of same will be perfectly satisfied that he has the best on the market.

LOW PRICES



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Successors to the Late James Cooper

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CANADIAN

Contract Record

A Weekly Journal of Public Works, Tenders, Advance Information and Municipal Progress

This Paper Reaches Every Week the Town and City Clerks, Town and City Engineers, County Clerks and County Engineers, Purchasers of Municipal Debentures and Leading Contractors in All Lines Throughout Canada

VOL. 17. TORONTO, MONTREAL — JULY 11, 1906 — WINNIPEG, VANCOUVER No. 19

THE CANADIAN CONTRACT RECORD
PUBLISHED EVERY WEDNESDAY

As an intermediate Edition of the Canadian Architect and Builder.

THE C. H. MORTIMER PUBLISHING COMPANY
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The Royal Institute of British Architects, London.

Examination for Admission as Associate.

An examination for admission as Associate of the Royal Institute of British Architects, London, will be held in Toronto, from the 16TH to 23RD of NOVEMBER, 1906.

Full particulars and all information regarding this examination can be had by applying to F. S. Baker, Honorary Secretary for Canada, Mail Building, Toronto.

Debentures For Sale

City of Medicine Hat, Alberta

Sealed tenders will be received up to MONDAY, AUGUST 20TH, 1906, for the purchase of $40,000 Waterworks, $8,000 Natural Gas and $10,000 Municipal Building Debentures of the City of Medicine Hat, dated August 1st, 1906, bearing interest at 5 per cent. per annum and repayable in 30 equal annual instalments of principal and interest. For further particulars apply to the undersigned. The highest or any tender not necessarily accepted.

W. N. ADSIT,
Secretary-Treasurer.

Sealed Tenders

addressed to M. W. Flannery, Town Clerk, will be received up to noon on SATURDAY, JULY 14TH, for the construction of about 40,000 square feet of artificial stone sidewalks in the Town of North Bay.

Plans and specifications to be seen at the office of the undersigned. A certified cheque payable to the treasurer for the sum of one hundred dollars ($100.00) must accompany each tender, this to be returned when the successful tenderer enters into a contract with the Town.

The lowest or any tender not necessarily accepted.

L. O. CLARKE, C. E.,
Town Engineer,
North Bay, Ont.

Debentnres for Sale

Sealed tenders will be received up to noon of MONDAY, JULY 16TH, 1906, for the purchase of $1,500 Debentures of the Town of Oshawa, dated July 3rd. 1906 bearing interest at 4½ per cent. per annum, and repayable at the office of the Treasurer, Oshawa, in 20 equal annual installments of principal and interest. The highest or any tender not necessarily accepted.

THOS. MORRIS,
Town Clerk.

Oshawa, July 6th, 1906.

PORT ELGIN WATER WORKS

Sealed tenders will be received by the Village Clerk until 8 p. m. on

TUESDAY, JULY 24TH, 1906,

for the construction of a system of Water Works for the Town of Port Elgin.

The works will be subdivided as follows:

Contract "A" Labor on Pipelaying, about 14,000 feet.
Contract "B" Pump House.
Contract "C" Water Tower and Foundation.
Contract "D" Cast Iron Pipes and Specials.
Contract "E" Fire Hydrants and Valves.
Contract "G" Pumping Machinery.
Contract "H" Boilers.
Contract "I" Well and Gallery.

Plans and specifications may be seen at the Town Hall, Port Elgin, or at the office of the Chief Engineer, Toronto, on or after July 6th, 1906

D. GEDDES, Esq., Reeve, Port Elgin, Ont.
R. MUNRO, Esq., Village Clerk, Port Elgin, Ont.
WILLIS CHIPMAN, Esq., C. E., 103 Bay Street, Toronto, Ont.

RIVER AUX RAISIN BRIDGES

Sealed tenders, marked "Tenders for Bridge Substructures," will be received by John Mullin, Esq., Clerk of Cornwall Township, Cornwall Centre, Ont., until 12 o'clock, noon, of MONDAY, JULY 16TH, next, for making the necessary excavation for piers, grading approaches, rip rapping same, construction of wing fences and building four re-inforced concrete and four ordinary concrete piers for the following bridges to cross the River Aux Raisin in the Township of Cornwall:

Moulinette Road Bridge, between Lots 30 and 31.
Mille Roches Road Bridge, between Lots 24 and 25.
McGillis' Bridge, on forced road near the foot of McGillis' Rapids.
St. Andrews Bridge, between Lots 12 and 13.

Plans, specifications, etc., may be seen at the office of John Mullin, Esq., Township Clerk, or at the office of Magwood & Walker, Civil Engineers, Colquhoun Block, Cornwall.

(Signed), W. H. MAGWOOD,
Civil Engineer in Charge.

Cornwall, June 20th, 1906.

Situation wanted by competent architectural draughtsman, 4 years English training, Winnipeg experience. Box 347, Winnipeg, Man.

TOWN OF OWEN SOUND DEBENTURES

Sealed tenders, addressed to the undersigned, will be received up to 3 o'clock p.m. on FRIDAY, JULY 20TH, 1906, for the following Debentures:

$45,000—Twenty years, 4%, for Gas Plant;
$45,000—Twenty years, 4%, for Electric Light Plant;
$12,500—Twenty years, 4%, for Construction of Bridge;
$10,000—Ten years, 4%, for Collegiate Institute Building.

Tenders will be received for the whole or any part.

No tender necessarily accepted,

A. J. SPENCER,
Town Treasurer.

Owen Sound, June 14th, 1906.

THE PROVINCE OF SASKATCHEWAN

DEPARTMENT OF PUBLIC WORKS

TENDERS FOR THE SUBSTRUCTURE

Of Traffic Bridge at Battleford

Sealed tenders addressed to "The Deputy Commissioner of Public Works, Regina, Sask." and endorsed "Tenders for Battleford Bridge" will be received up to 4.30 p. m., MONDAY, AUGUST 13TH, 1906, for the supply of all material and the construction of eight (8) concrete piers and two (2) abutments for a traffic bridge over the Saskatchewan River at Battleford.

About 5,000 cubic yards of concrete will be required in the work.

A certified cheque for the sum of $4,000 must accompany each tender. The cheque will be retained until the necessary contract and bond are executed and the work commenced.

The cheques of unsuccessful bidders will be returned after the contract is signed.

The right is reserved to reject any or all bids or waive any defects.

Plans, specifications and all information may be obtained on application to the undersigned.

Dated at Regina, Sask., June 29, 1906.

F. J. ROBINSON,
Deputy Commissioner of Public Works

William Swan & Sons is the name under which James Swan, carpenter, Montreal, has registered his business.

The contracting company of Frank Bouchard and Hector Bouchard, Montreal, have registered as F. Bouchard & Frere.

Conner & McLean is the firm name under which two well known young men of Brandon, Man., will do business as plumbers and steam fitters.

[FOR ADDITIONAL ADVERTISEMENTS FOR TENDERS SEE NEXT PAGE.]

AUCTION SALE of Valuable Brick Yard and Plant at La Riviere

Under and by virtue of the powers contained in certain mortgages, which will be produced at the time of sale, there will be offered for sale by public auction on

Friday, the Twentieth Day of July, A.D. 1906

AT THE HOUR OF 2.30 O'CLOCK IN THE AFTERNOON

at the offices of the Pressed Brick and Tile Company, Limited, at

LA RIVIERE, IN THE PROVINCE OF MANITOBA,

by MICHAEL CONWAY, Auctioneer, the following property, namely:

THE WORKS OF THE PRESSED BRICK AND TILE COMPANY, LIMITED, AT LA RIVIERE,

Aforesaid, being:

FIRST: The whole of Legal Subdivision Three (3) and the East Half of Legal Subdivision Six (6) of Section Thirty (30) in Township Three (3) in Range Nine (9) West of the Principle Meridian in Manitoba.

SECOND: in the Townsite of La Riviere in the Province of Manitoba and being composed of all that portion of Legal Subdivision Four (4) of Section Thirty (30) in Township Three (3) Range Nine (9) West of the Principal Meridan, described as follows: Commencing at a point on the Easterly Limit of said Legal Subdivision Four (4) distant two hundred and eighty-seven and two tenths (287.2) feet from the Northeast corner thereof; thence West sixty-one and eight-tenths (61.8) feet, said Easterly Limit of Legal Subdivision Four (4) being assumed due North; thence fifty-one degrees and fifteen minutes [51° 15′W] West to a point distant perpendicularly Southerly Sixty-six Feet from the Southerly Limit of "Station Grounds" as same are shown on a plan of subdivision of part of said Section and other lands registered in the Registry Office for the County of Rock Lake as No. 61; thence Southwesterly parallel with said Southerly limit of "Station Grounds" to a point distant perpendicularly Westerly three hundred [300] feet from the Easterly limit of legal subdivision Four [4] aforesaid; thence South parallel with said Easterly limit of legal subdivision Four to the Southerly limit thereof; thence Easterly along the Southerly limit of legal snbdivision Four to the Southeast corner thereof; thence North along the Easterly limit of legal subdivision Four to the place of beginning, containing eight and three-tenth acres, more or less, together with all buildings and erections thereon, and the

Plant, Machinery, Tools, and Other Chattels of the Said Company.

The vendors are informed that the lands of the said Company comprise about Sixty (60) acres and include a very large supply of shale suitable for making buff and red pressed brick, and that there is a spur track on the said property leading from the Canadian Pacific Railway, and that there are the following buildings on the said property, namely: Frame engine and boiler room and extension, 1 large brick drier, frame engine and blower room, 9 circular brick kilns, 1 large dwelling house and 1 small dwelling house.

The premises of the said Company are situated close to the C. P. R. Station at La Riviere.

The vendors are informed that the machinery consists of 1 Boyd Press, 1 Williams Pulverizer, 1 Jeffries Conveyor, 1 Screen (Dunlap Perfect), 1 Extra Set Plates, 1 Set Fine Screws, 1 Blower and Engine, 1 Compound Engine, 1 Boiler, 1 Fan, 1 Steam Pump and Heater, 1 Grinding Machine, 4 Emery Wheels, 1 Screw Press and Dies. The tools are said to form a complete complement requisite for the operation of machinery and brick yard. There is also said to be a stock of about twenty-five tons of coal on the premises.

The vendors are informed that all buildings, machinery and tools, etc., are comparatively new and in good condition.

The above property and chattels will be offered for sale en bloc, subject to a reserve bid.

TERMS: Twenty per cent. of the purchase money to be paid down at the time of sale, balance to be paid in thirty days.

For further particulars apply to

NATIONAL TRUST COMPANY, Limited, Winnipeg, Manitoba, Vendors.

Or to MESSRS TUPPER, PHIPPEN, TUPPER, MINTY & McTAVISH.

Solicitors, Winnipeg, Solicitors for the Vendors.

Dated at Winnipeg this 26th day of June, A.D. 1906.

TENDERS WANTED

Separate tenders will be received for all trades required in the erection of St. Johns Presbyterian Church, corner Broadview and Simpson avenues. Andrew Sharp, architect, 55 Smith street, Toronto. Plans and specifications may be seen there, or at the Builders' Exchange, Yonge street arcade. Tenders close on THURSDAY, JULY 19TH.

CONTRACTS OPEN.

STRASSBURG, SASK. — A new school is to be erected here this summer.

THESSALON, ONT.—L. King will erect a two-storey brick block on Main street.

DEER PARK, ONT.—F.S. Pickering intends building a residence on St. Clair avenue.

STRATHCONA, SASK.—The Town Council intend issuing $16,000 sewer debentures.

WEYBURN, SASK. — Plans have been prepared for the R. C. church building.

YELLOW GRASS, SASK. — The Bank of Commerce will erect a new building here.

GRAND VIEW, MAN.—W.J. Swain has taken tenders for the erection of a parsonage here.

FORT FRANCIS, ONT.—A by-law to establish a system of waterworks here has been carried.

SHERBROOKE, QUE. — The Dominion Parliament have appropriated $20,000 for drill hall.

CHATHAM, N. B.—It is said that a company is being formed for the purpose of building a tannery here.

MONCTON, N. B.—Plans are being prepared for a three-storey brick block on Main street for Mr. McLeod.

TREHERN, MAN.—R. J. Mills will receive tenders up to August 1st for $18,000 five per cent. school debentures.

CECIL, SASK.—V. R. C. Hutcheson has taken tenders for the erection of a school house in Macdowall, S.D.No.130.

ST. HYACINTHE, QUE.—An appropriation of $28,000 has been made by the Dominion Parliament for a drill hall.

THREE RIVERS, QUE.—$30,000 has been included in the supplementary estimates of parliament for drill hall here.

BLYTH, ONT.—A by-law has been carried to loan $10,000 to the Stephenson Carriage Co. for extension of their works.

WIARTON, ONT.—The supplementary estimates of the Dominion Parliament include $4,000 for reconstruction of breakwater.

MORDEN, MAN.—C. McCorquodale will receive tenders up to July 20th for the purchase of $9,000 5 per cent. town debentures.

MINNEDOSA, MAN.—Mrs. Bagshaw will receive tenders up to July 15th for remodelling the building occupied by Black Bros.

FERGUS, ONT.—The William Ryan Company, of Toronto, have taken tenders for alterations and additions to their packing house here.

GLENCOE, ONT.—A by-law has been carried to loan $3,000 to the Fletcher Manufacturing Company to enlarge their works.

ANDOVER, N. B.—C. H. Elliott will receive tenders up to July 23rd for extension of the water system. Plans with Carter & Elliott.

DURHAM, ONT.—W.B. Vollet town clerk, has taken tenders for the construction of granolithic sidewalks on Sadler and Queen streets.

HUMBOLDT, SASK.—Tenders will be received by the Manager Union Bank, up to July 14th, for the erection of a two-storey Bank building.

VICTORIA, B.C.—Pemberton & Son, real estate brokers, have sold a sight on Cadboro Bay road on which a large residence will be erected.

REGINA, SASK.—J. H. Haslam, of the Haslam Land Company, will build a three-storey block on Scarth street. W. W. LaChance, architect.

BRANTFORD, ONT.—A building permit has been granted to the Brantford Screeu Company for factory building in West Brantford, cost $19,000.

BARRINGTON PASSAGE, N. S.—G. W. Smith will receive tenders up to July 21st, for erection of a hall building for the Order of Oddfellows.

SIMCOE, ONT.—W. Cook will receive tenders up to July 14th for the erection of a school house S. S. No. 7, Charlotteville and Windham.

GUELPH, ONT.— McPhee & Mahoney, architects, have taken tenders for erection of a double brick house on Woolwich street for J. Stockford.

CARMAN, MAN. — A. Malcolmson has taken tenders for construction of supply mains and distribution system for waterworks, also for sewerage system.

WEST SELKIRK, MAN.—Tenders have been taken for the erection of a bank and office building for the Traders' Bank. F. S. Baker, Toronto, architect.

NANAIMO, B. C. — Marshal Bray, Assistant Commissioner of Lands and Works, has taken tenders for erection of a wharf and approach at Gabriola island.

CHARING CROSS, ONT.—T. Knott Box 34, will receive tenders up to July 20th for furnace, with necessary pipes, registers, etc., for the Methodist church here.

PETERBORO, ONT.—J. A. and W. Stubbs will erect dwellings on Water street.—T. Moore, A. Hanna and Mrs' Good will build brick dwellings on George street.

BRODHAGEN, ONT.—F. Jacob, Township Clerk, will receive tenders up to July 23rd for repairing and completion of the Nicholson drain in the township of Logan.

VARNEY, ONT.—J. Allan will receive tenders up to July 28th for building a new truss bridge over the river on town line between Egremont and Proton, near Cedarville.

BOUCK'S HILL, ONT.—G. Lane, township clerk, will receive tenders up to July 26th, for doing drainage work for the Moffatt-Fetterley drain, township of Williamsburg.

BELLEVILLE, ONT. — H. Corby, Ex. M. P. is said to have the intention of purchasing the Merchants Bank building on Campbell street and remodelling it for a public library.

KINGSTON, ONT.—It is expected that one of the new Normal Schools will be located here.—The restoration of Queen's Medical College will be proceeded with at once.

SOUTH QU'APPELLE, SASK.—J. P. Beauchamp & Co. will receive tenders

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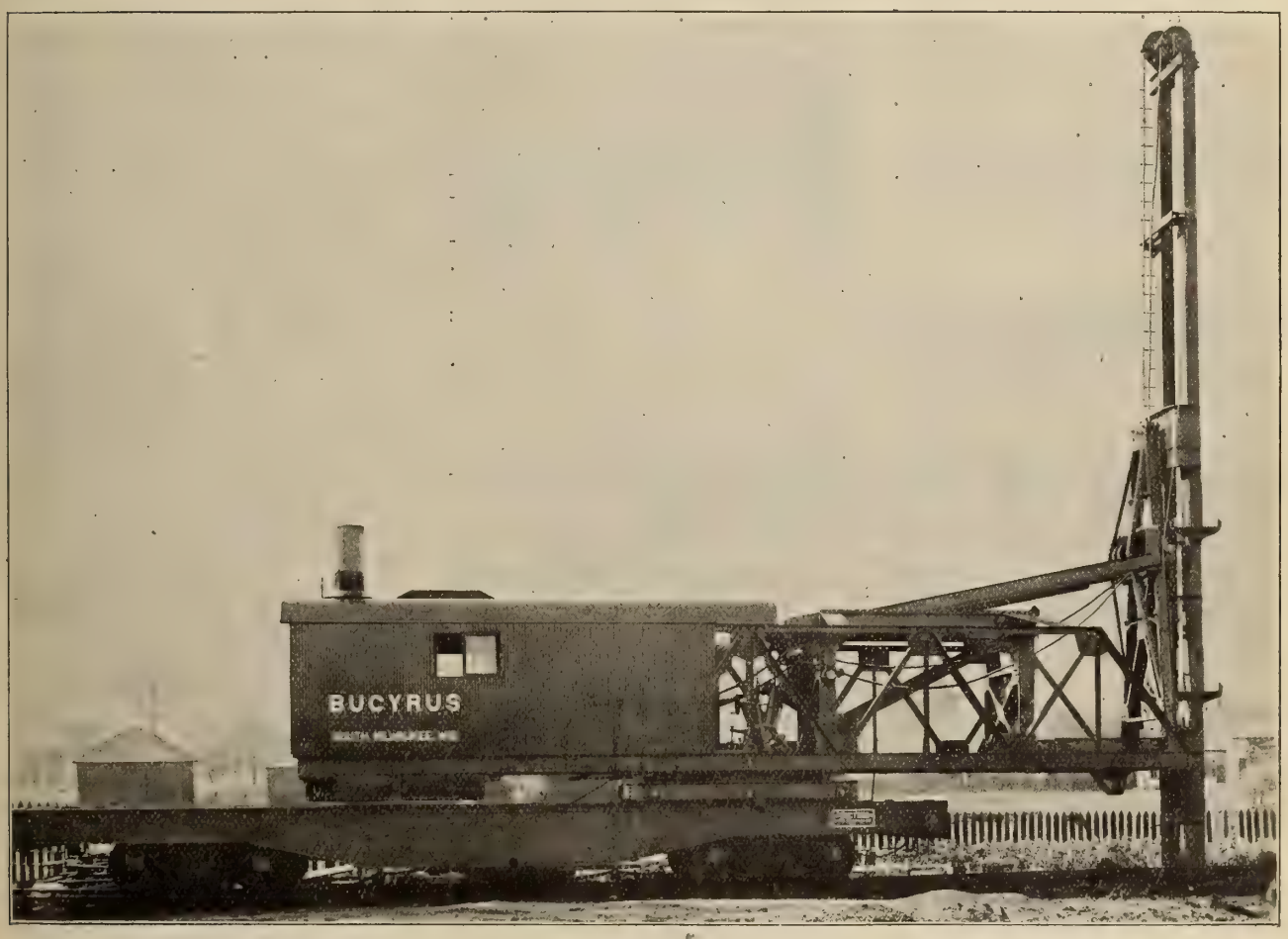

SPECIFICATIONS ON APPLICATION

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MONTREAL

up to July 14th, for erection of a brick store building. Plans with W.M. Dodd, architect, Regina.

HEWARD, SASK.—J. A. Montjoy will receive tenders up to July 14th for building foundations also for furnishing material and constructing a four-storey grist mill. Plans at office of Montjoy & Glover.

ARDEN, MAN.—M. E. Broughton will receive tenders up to July 17th for construction of two steel bridges over White Mud river. Plans with above named and with A. R. Davis, C. E., Winnipeg.

CALGARY, ALTA. — The Stevens Paint Company are preparing to build a three-storey brick warehouse on Seventh avenue, cost $25,000.—The City is considering the construction of a traffic bridge to Elbow Island.

BATTLEFORD, SASK. — Deputy Commissioners of Public works, Regina, will receive tenders up to August 13th for supply of material and construction of eight concrete piers and two abutments over the Saskatchewan river here.

SASKATOON, SASK.—J. P. Hall, Willow City, N. D., purposes establishing a soap factory here.—A departmental store, 100 x 75 ft., is to be erected west of the C. P. R. yards.—A large foundry is to be erected on Twenty-second street.

BRANDON, MAN.—The Northwest Threshing Company, of Stillwater, Minn., have selected a site for a new warehouse. —The Bell Telephone Company intend enlarging their offices.—O. L. Harwood expects to erect an office building on Ninth street.

MACLEOD, ALTA.—E. F. Brown, Town Clerk, will receive tenders up to July 26th for laying 8,300 feet 8 in., and 16,300 feet 6 in. wire-wound wood pipe, 35 fire hydrants and 41 grate valves and boxes. Plans with Paradis & Thorold, Calgary.

HALIFAX, N. S.—It is rumored that a large apple warehouse will be constructed at Sand Point, also that the C. P. R. will erect a cold storage warehouse at the same place.—The Council have decided to lay concrete sidewalks on South street from Pleasant to Church, cost $3,591. Sidewalks will also be laid on Spring Garden road, cost $5,632.

EDMONTON, ALTA.—The following permits have been issued: J.Y.Wells, dwelling, St. James avenue, cost $2,500; W.G. Robinson, dwelling, Rolond street, cost $2,500; J.W.Walker,dwelling Jasper ave., cost $2,200; J. W. Bond, dwelling, Third street, cost $2,500; L. D. W. Bender, dwelling, Fifth ave., cost $1,800; Revillon Bros., dwelling, cost $1,800.

MOOSEJAW, SASK.—Jones & Bunyard, architects, have taken tenders for the erection of a building on the exhibition grounds. The same architects are preparing plans for a store and office building on Main street for M. J. Macleod and J. H. Kern.—The City Engineer has been instructed to prepare plans for a dam at Snowy Springs, and laying a pipe line to the city.

NORTH LANCASTER, ONT. — A. J. Macdonald, Township Clerk, will receive tenders up to July 18th for excavating, etc., construction of wing centres and two concrete abutments, also for a rivetted woven truss steel span for McMillan bridge over Beaudette river in Lancaster township. Plans with above named and with M. J. McLennan, Williamsburg.

HAMILTON, ONT.—The Hamilton Steel & Iron Company intend enlarging their plant here, cost $250,000.—It is understood that one of the new Provincial Normal Schools will be located here.—The Dominion Parliament have appropriated $6,000 for alterations to the post-office building.—Building permits have been issued to W. Curry for a brick house on Freeman place, cost $2,800, and to R. P. Anderson for brick addition to house, 233 Locke street, cost $1,500.

LONDON, ONT.—W. O. Graydon, City Engineer, will receive tenders up to July 12th for construction of sewer on Wellington street, from St. James to Grosvenor.—R. M. McElheran, Secretary Board of Education will receive tenders up to July 12th for painting at the city schools.—G. Craddock, architect, has taken tenders for a brick house on Richmond street.—Building permits have been issued as follows : W. A. Young, 1½ story brick residence, 505 Oxford street ; Thomas Eccles, for a brick cottage, Mamelon street ; J. R. Munroe, a story and a half brick residence, Forward avenue ; Wm. Tytler, a story and a half brick residence, Central avenue.

VANCOUVER, B. C.—Herman & Burwell, engineers, are taking levels for the proposed reservoir on Little Mountain, Fairview.—The City Council has decided to submit a by-law to raise $60,000 for a new market building.—It is reported that the G. N. R. and the N. P. R. will build a large hotel to cost about $750,000.—R. Kelly and R. Martin are interested in a scheme to erect a sugar refinery in Prince Rupert, the new G. T. P. R. terminus.—The following building permits have been issued : Chas. Lyon, dwelling, Drake and Howe streets, $3,000; John Reid, dwelling, Second avenue, $1,000; G. E. Williamson, dwelling, Tenth avenue, $1600 ; Chas. H. DePencier, dwelling, Seventh ave., $4,000.

OTTAWA, ONT.—Building permits have been issued to the following : Charles Bourrett, brick veneered dwelling, Clarence street, $1,200 ; W. H. York, brick veneered dwelling, James street, $1,600 ; H. Pepin and Company, St. Peter's school, Friel street, $10,900 ; S. McClenaghan, bank office building, corner Somerset and Bank streets, $3,000 ; Adolph Thoburn, row of seven brick houses, Laurier avenue, $15,000 ; R. K. Blakeney, brick dwelling, Besserer street, $7,300 ; Russell Blackburn, mica factory, Dufferin road, $6,000.—N. J. Kerr, City Engineer. will receive tenders up to July 11th for construction of pavements on Dalhousie and Clarence streets and Laurier avenue. — P. E. Ryan, Secretary, Commissioners of Transcontinental Railway, will receive tenders up to July 12th for 1,010,000 railway ties.

MONTREAL, QUE.—The Dominion Parliament in their supplementary estimates have made the following appropriations for the city: Additions and alterations to examining warehouse, $7,000; new military store buildings,cost $10,000; building for pneumatic tube system for post-office, $55,000; improvements to public buildings, $8,000; barracks for permanent corp, $20,000.—The followlng building permits have been granted: Fisher & Sons, ten-storey building, corner Victoria square and Craig street, cost $100,000; E. Lapointe, four brick and stone dwellings, Garnier ave., cost $8,000; H. McIntyre, brick and stone factory, Commissioners street, cost $10,000; J. D. Coutura, brick and stone dwelling, Laval ave., cost $5,000; L. P. Forest, three dwellings, St. Urban street, cost $9,000; H. B. Smith, repairs to factory, brick and stone, Colborne and Wellington streets, cost $19,000; Mrs. J. A. C. McIntyre, three-storey warehouse, Craig street, cost $143,000; J. Johnson of Mance street, stone and brick dwelling, cost $7,800; Laval and Christmas, Ltd., stone warehouse, Queen street, cost $36,000; A. R. & S. S. Noin, educational building, stone and brick, cost $20,000; St. Thomas church, Sherbrooke street, brick and stone church, cost $78,000. —F. Gallagher is procuring additional site for extension of his premises.

FORT WILLIAM, ONT. — H. R. Halton, architect, is preparing plans for a three storey brick block, corner Simpson street and Victoria avenue, for Fort William Hardware Co.—Same architect is preparing plans for five brick residences corner Miles and Archibald streets.—Plans have been prepared for business block on Victoria avenue, for John King. —J. C. Stinson, architect, is preparing plans for three-storey block on Victoria avenue for Snelgrove, Waddington & Co. —Same architect is preparing plans for two dwellings for E. S. Rutledge.—P. J. Manion, G. H. Graham and T. J. Horn, purpose building a large hotel, corner Victoria avenue, and North street, cost $1,000,000.—Building permits have been issued as follows: Robt. Strachan, brick veneer dwelling, cost $5,000 ; Canadian Pacific Railway, temporary frame and iron freight sheds, cost $30,000 ; W. Passingham, two frame residences, cost $3500 ; John Conway, two frame dwellings, cost $2600 ; J. P. Dale, frame dwelling, cost $1350 ; E. S. Rutledge, frame dwelling, cost $2500 ; A. W. Frodham, solid brick business block, cost $8,000 ; J. Y. Grifin. frame and iron warehouse, office and stable, cost $2800 ; John Laughton, cement block dwelling, cost $2500; John Laughton, frame dwelling, cost $1400 ; Commercial Club, solid brick addition, cost $7250; W. W. Speer, cement block dwelling, cost $2100.

WINNIPEG, MAN. — J. Schwab, architect, has taken tenders for the erection of a brick building, corner King and Dufferin avenue, for J. Kluner.—McMillan & Vollans, real estate dealers, have sold the property, corner Graham and Vaughan streets, which will be remodelled.—F. C. Hicks will build five houses on Maryland street, cost $10,500. — Kilgour-Rimer Company purpose building an addition to their premises on Princess street, cost $25,000. — R. J. McKenzie, intends building dwellings on Preston and Lendrum streets. — J. A. Martin will have a residence built corner Shore street and Broadway, cost, $4,000. —Stevenson & Paterson, architects, have taken tenders for erection of a brick and stone building, "Carlton Hotel," for W. S. McDonald.—The Works Committee are receiving tenders this week for construction of macadam pavement on Lenore and Ruby streets, and asphalt pavement on Bricker street, also for sewers and sidewalks.—E. R. Workman, architect, has taken tenders for erection of an apartment house on Balmoral street.—J. D. Atchison, architect, has taken tenders for the erection of a building corner Kate and William streets for D. W. McLean.—D. Smith, architect, has taken tenders for construction of a bag factory for the Smart Bag Company. —The City Engineer has been instructed to prepare plans and estimates of cost of a bridge over the Red river at foot of McDermot ave.

TORONTO, ONT.—A. G. Strathy & Co., real estate brokers, have leased the property 232-4 Adelaide street west to C. Rogerson tobacconist, who will have it altered for shop purposes.—They have also sold a lot on 23-9 Elizabeth street, which will be built upon by a plumbing firm.—The same dealers have sold a site cor. Elm and Elizabeth streets on which a building will be erected.—Tenders are being taken at 228 Rusholme road for the erection of a brick and stone house. —The Cannon Granite Company, 484 Yonge street, are taking tenders for carpentry work on factory.—The Board of Control have instructed the City Engineer to report upon the proposed straightening of the Don and the improve-

ments of Ashbridge's Bay marsh property, also to prepare plans and call for tenders for the erection of Lansdowne avenue subway.—It has been decided that the site for Knox College will be on St. Joseph street.—Tne directors of the central Y.M.C.A. will build a three-storey addition to their building corner McGill and Yonge streets.—The plans have been approved for the Presbyterian church, corner Gerrard and Reid avenue. —The property corner Bathurst and Adelaide streets has been purchased by Vicar-General McCann, and it is expected a hall will be erected thereon for St. Mary's parish.—The Board of Control will receive tenders up to July 17th for construction of asphalt pavements on Bain avenue, and Hepbourne street, bitulithic pavement on Gibson avenue, sewers on Gerrard street and Eastern avenue, also a number of concrete sidewalks.—The Civic Works Committee have decided to purchase an asphalt plant, cost $30,000.—The city gives notice of its intention to construct the following asphalt pavements: St. George street, from Bloor to College, cost $18,136; Christie street, from Bloor to C.P.R. cost $22,156; Pape avenue, from Gerrard street to Danforth road, cost $22,602; brick pavement on Royce avenue, cost $23,090, and several others.—The construction of the following pavements was recommended by the Works Committee: Asphalt — Roncesvalles avenue, from Queen to Boustead avenue, $48,956; Mutual street, from Gerrard to Carlton, $4,218; Ontario street, from Carlton to Howard, $13,470.— Vitrified block — Bruce street, from Shaw to Dundas, $3,608; John street, from King to Front, $10,475. — Bitulithic — Berkeley street, from Duke to Queen, $6,687; also from King to Duke, $2,022; Dupont street, from Bathurst to Christie, $12,856.— Macadam—Esther street, from Queen to St. Patrick, $6,354.—Building permits have been issued as follows: J. J. McCaffery, alterations to dwelling, corner Bay and Adelaide streets, cost $4,000; T. Pennock, pair 3-storey brick dwellings, Bellwoods avenue, cost $5,000; F. L. Beecroft, 2½-storey stone and brick dwelling, Roxborough street, near Yonge, cost $4,000; Edward Gurney, 2-storey and attic stone and brick dwelling, Walmer road, near Lowther avenue, cost $50,000; Geo. Phillips, 7 pairs 2-storey brick dwellings, Grace street, cost $35,000; Hall & Evans, three 2-storey stone and brick dwellings, 420-4 St. Clarens avenue, cost $6,000; Jos. Swain, two 2½-storey brick dwellings, Abbott avenue, cost $5,000; A. Roberts, 2-storey and attic frame dwelling Armstrong avenue, cost $2,200; F. Nicholls, 2½-storey brick dwelling, Roxborough street, near Yonge street, cost $7,000; A. W. Boyd, 2½-storey brick dwelling, Macpherson avenue, near Yonge street, cost $6,000; M. Egan, three 2-storey and attic brick dwellings, Givens street, cost $6,500; Wilkins & Co., six 2½-storeybrick and stone dwellings, Macpherson avenue, near Avenue road, cos $13,500; F. Courtemanch, three 2-storey brick dwell-

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ings, Grace street, cost $6,600; Wm. Pudifin, 2-storey brick dwelling, Dufferin street, cost $2,500; G. F. Cudmore, 2-storey and attic stone and brick dwelling, Boustead avenue, cost $3,300; Jos. Kilgour, 2-storey brick and stone stable, Pears avenue, cost $6,500; D. A. Atkinson, pair 2-storey brick and stone dwellinas, 265-7 Beatrice street, cost $4,000; Mrs. G. Gooderham, 2-storey brick and stone stable, 224 St. George street, cost $6.000; Sisterhood of St. John the Divine, 2-storey brick addition to building, corner Bellevue avenue and Oxford street, cost $8,000; Dr. C. W. Brand, 2-storey brick and stone dwelling, Salem avenue, cost $2,500; Stewart Hartshorn Co. Ltd., 1-storey brick factory, 54-60 River street, cost $15,000; T. Eaton Co. Ltd., 6-storey and basement brick factory, Louisa street, cost $30,000; A. B. Coleman, pair 2-storey and attic brick dwellings, Dowling avenue, cost $6,000; H. Galbraith, pair brick dwellings, 270-2 Grace street, cost $4,800; G. C. Miles, 2½-storey brick and stone dwelling, Laxton avenue, cost $4,500; H. F. Squires, pair 2-storey and attic brick dwellings, Palmerston boulevard, near Herrick street, cost $7,000; G. H. Ploss, 2-storey and attic brick dwelling, Smith street, cost $3,500; Jos. Russell, 2 pair 2-storey and attic brick dwellings, 1308 Queen street east, cost $8,800; Kew Beach Methodist Church, 2-storey frame and concrete church, Bellfair avenue, cost $4,500; Jos. S. Craig, 2½-storey brick dwelling. Brooklyn avenue, cost $3,000; A. Gibson, pair 2-storey and attic brick dwellings, Avenue road, near Cottingham street, cost $4,500; Mrs. M. C. Hill, four 2-storey and attic brick dwellings, Jerome street, cost $10,400; F. Spencer, 2-storey and attic brick dwelling, Dunn avenue, cost $3,200; Ansman & Marshall, pair 2½-storey brick dwellings, corner Brunswick avenue and Wills street, cost $5,500; J. H. Stanford, 2-storey and attic brick dwelling, Palmerston boulevard, cost $5,500; First Baptist Church, 1-storey brick church, corner Edward street and University avenue, cost $7,000; I. W. W. Plewes, 2½-storey brick dwelling, corner Avenue road and Chicora avenue, cost $4,000; E. B. Collett, 2-storey brick and stone dwelling, Portland street, cost $2,400; Geo. Coxon. three 2½-storey brick and stone dwellings, 50-54 Givens street, cost $6,000; Bell Telephone Co., 1-storey and basement brick and concrete Telephone Exchange, Lee avenue, cost $5,000; M. Proctor, pair 2-storey brick dwellings, 12-14 Emerson avenue, cost $5,000; F. B. Poucher, 2-storey brick dwelling, Sparkhall avenue, cost $2,000; Jas. Nesbitt, 2-storey and attic brick dwelling, Symington avenue, near Antler street, cost $2,800; Kay Bros. pair 2-1/2-storey brick dwellings, Langley avenue, cost $5,500; H. C. Russell, 2-storey and attic brick dwelling, Bain avenue, cost $2,700; R. D. Edwards, 3-storey brick dwelling, 210 Jarvis street, cost $2,500.

CONTRACTS AWARDED.

MONCTON, N.B.—Freight car repair shop for I.C.R.: E. A. Wallberg, Montreal, contractor.

WINCHESTER SPRINGS, ONT.—Erection of new bridge: Steel Concrete Company, Montreal, contractors.

BARRIE, ONT.—450 h. p. cross compound condensing: Goldie & McCulloch, Galt, cost $5,891.—300 kilowat generator: Allis-Chalmers-Bullock Company, Montreal, cost $5,862.

PORT ARTHUR, ONT.—Erection of public school building: R. Hamer, contractor, cost $17,850.—Excavation work for new C.P.R. station: Sherwood & Dier, Brockville, contractors.

PARRY SOUND, ONT.—C. Gillespie has been awarded the contracts for the following: Residence on Belvidere avenue for H. Y. Complin; residence corner Rosetta and Church streets for Sheriff Armstrong, cost $4,000, and a dwelling for Mr. Johnson, cost $2,500.

PENETANGUISHENE, ONT.—Erection of public school building: R. R. Rogers; plumbing, heating and ventilation, John Ritchie Plumbing & Heating Company, cost $16,000.—High school building: Carpentry, A. Tessier; masonry, W. Blanchard; painting and glazing, J. Kelly; heating and plumbing, M. Gendron. T. Kennedy, architect, Barrie.

MONTREAL, QUE.—Warehouse on Craig street, for McIntyre, Son & Company: Peter Lyall & Sons, contractors. Hutchison & Wood, architects.—Apartment building, Sherbrooke street, for W. Benthon: James Shearer Construction Company, contractors.—Supply of cast-iron pipes: R. Maclaren, successful tenderer, cost $12,599.70.—Supply of brass castings: Garth & Company, contractors, 23 cents a lb.

TORONTO, ONT. — National Club building on Bay street: Masonry, Holtby Bros.; carpentry, J. Scott; structural steel work, McGregor McIntyre Company; excavation, Page & Britnell; estimated cost $100,000. Curry, Sproatt & Rolph, architects.—Enlargement of public schools: Brock avenue.—Carpenter work, E. Hallett, $2,900; mason work, H. Lucas and Son, $1,847; painting, Fletcher & Winn, $310; plastering, Thos. Gander & Son, $377; tinsmithing, W. E. Dillon & Co., $582. Dovercourt road.—Carpenter work, J. McLeod, $6,700; mason work, J. McLeod, $4,450; painting, J. Barnett, $840; plastering, E. Warren, $1,547; roofing, G. Duthie & Son, $826; metal ceiling, A. Matthews, $987; heating and ventilating, W. J. Ruthy & Co., $2,265; structural sheet iron work, McGregor, McIntyre & Co., Limited, $292. Palmerston avenue.—Carpenter work, E. Hallett, $9,950; mason work, J. McLeod, $6,400; painting, J. Barnett, $890; plumbing, E. Warren, $1,378; roofing, A. J. Moody, $769; tinsmith

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and galvanized iron work, A. Matthews, $969; heating, W. J. Ruthy & Co., $2,390; structural sheet and iron work, McGregor & McIntyre Co., Limited, $292.50. Dufierin street.—Heating and ventilating, Fred Armstrong, $9,976; carpenter work, Wm. Eaton, $141.—Symons & Rae, architects, have awarded to J. A. Berridge & Company the contract for all trades for erection of ten first-class houses, corner Beverley and St. Patrick streets, contract price, $40,000.

OUTING OF ENGINEERS' CLUB.

The Engineers' Club of Toronto have arranged to have their annual outing on July 13th to Buffalo, N. Y. They are scheduled to leave the Union Station, Toronto, by G. T. R. at 7 a.m. and arrive in Buffalo at 10.15. The programme arranged for, during their stay in that city, is an inspection of breakwater and harbor at 11 a.m. and an inspection of City Waterworks Pumping Station at 12 o'clock. At 2.30 p.m. the party will visit the Lackawana Steel Works at East Buffalo. The time set for starting on the homeward trip is 7 p.m.

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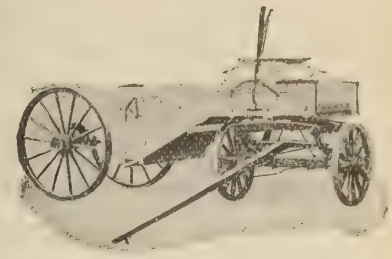

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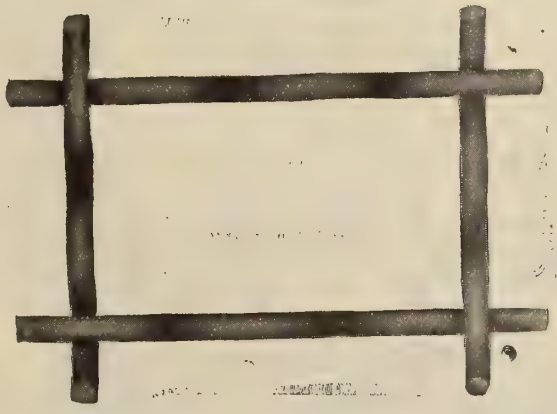

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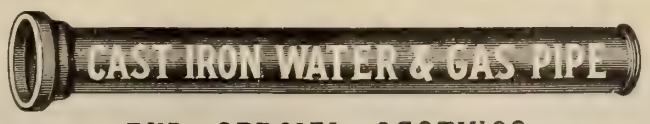

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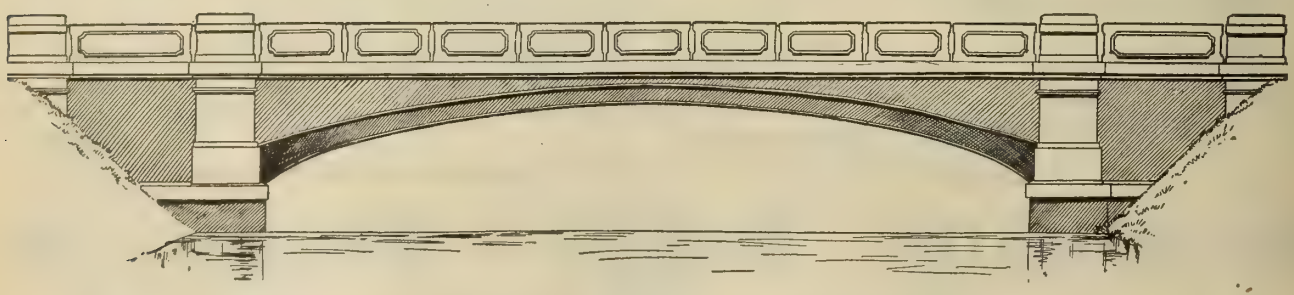

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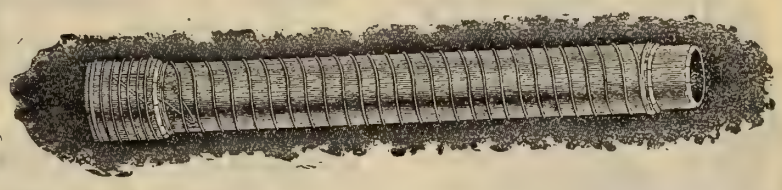

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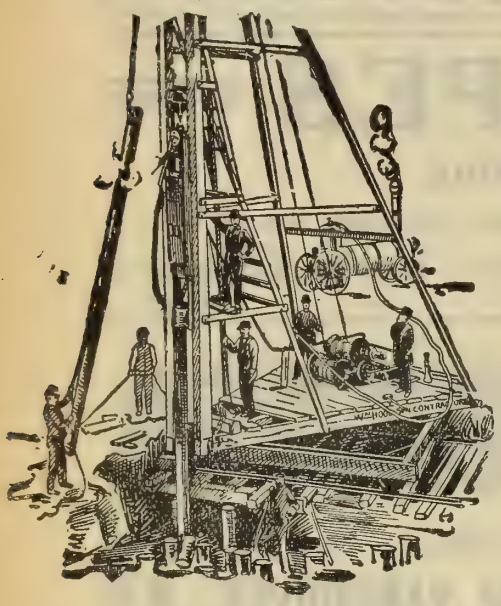

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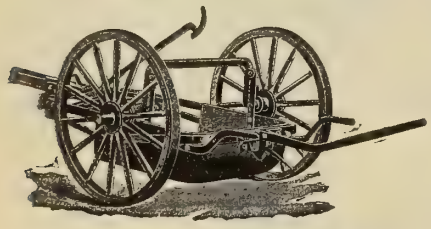

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							Neat.					3 (Sand) to 1 (Cement)				
					Initial	Final	1 dy.	7 dys	28 dys.	3 mos	1 yr.	1 dy.	7 dys.	28 dys.	3 mos.	1 yr.
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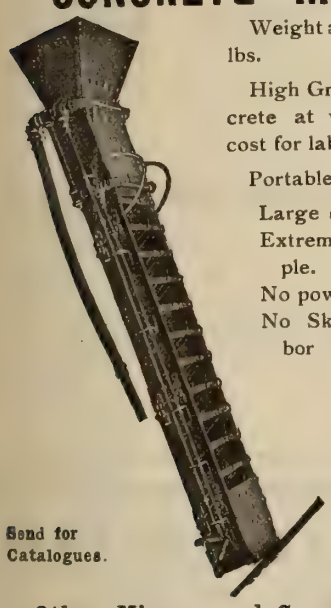

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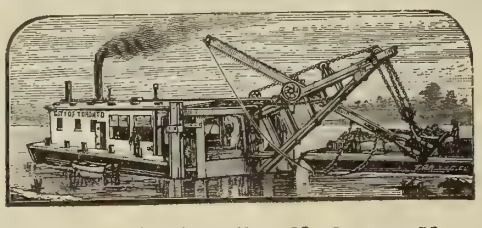

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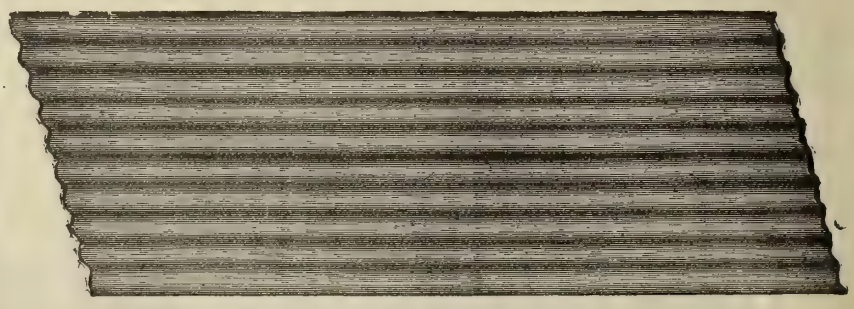

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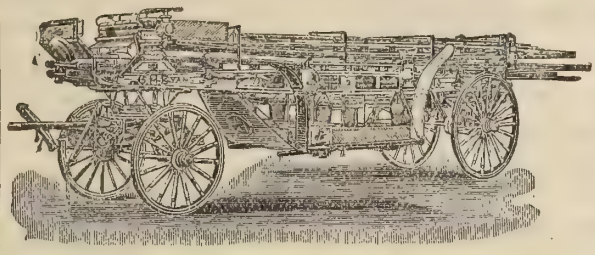

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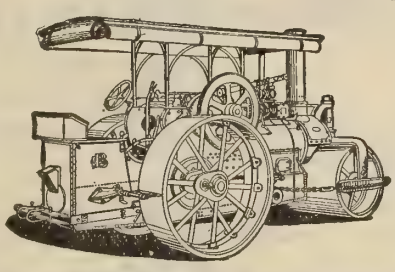

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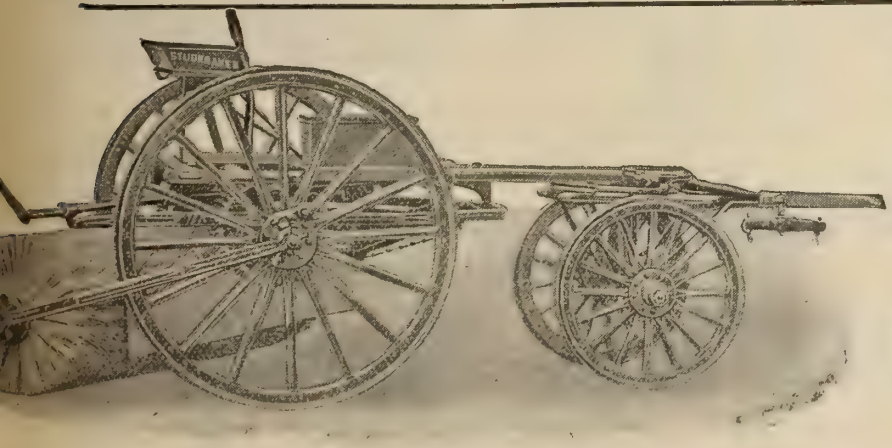

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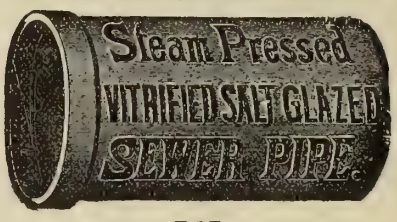

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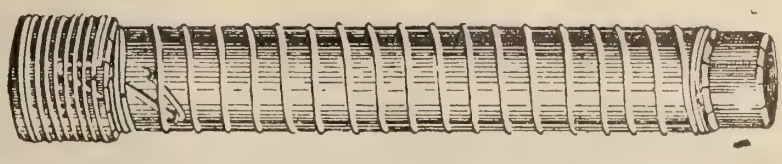

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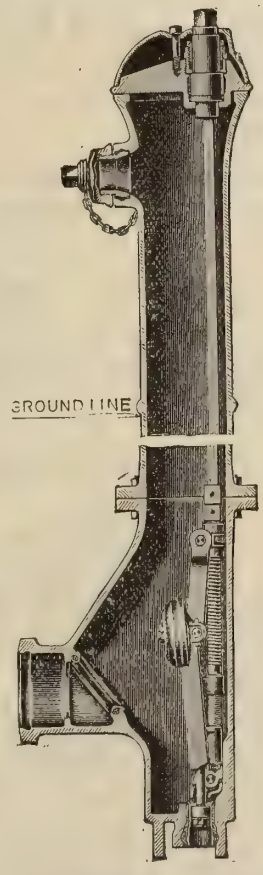

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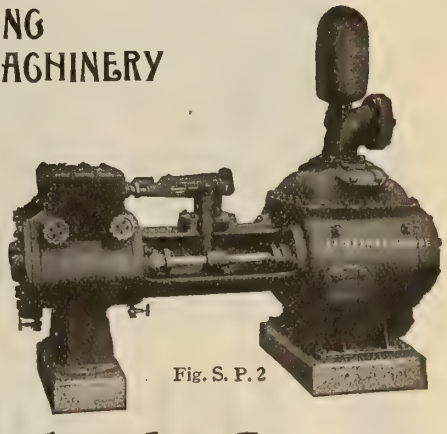

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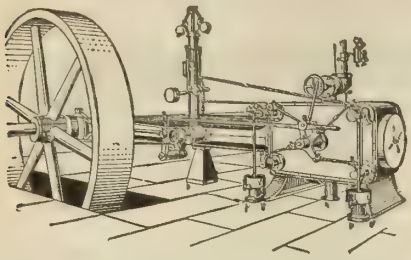

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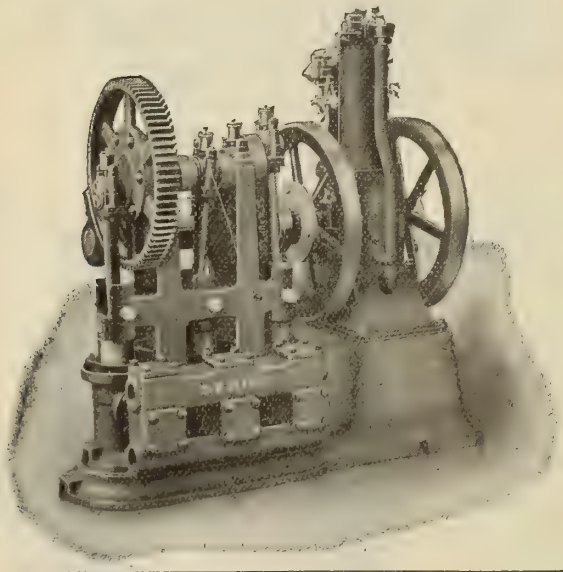

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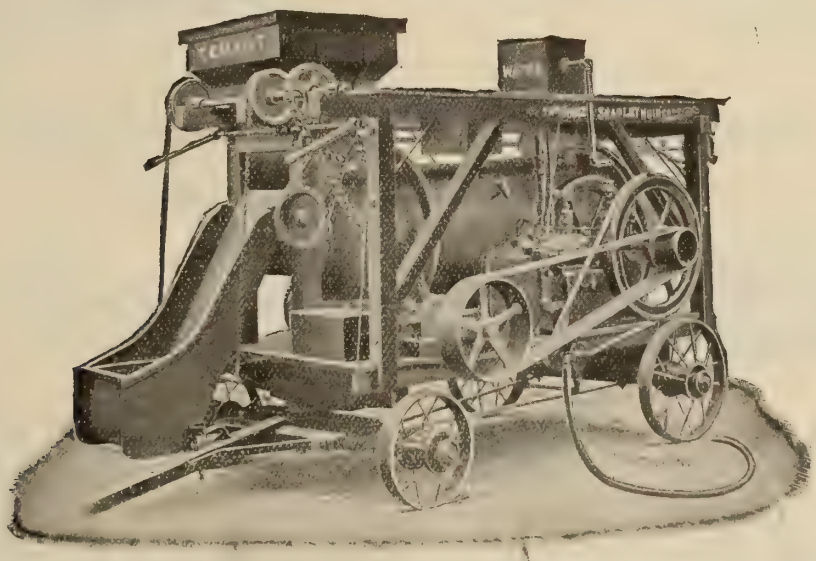

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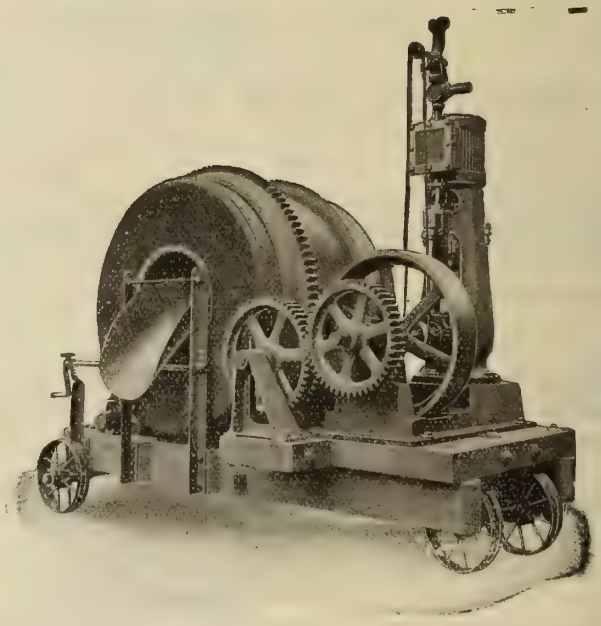
In a word, it is the most-up-to-date Mixer on the market.



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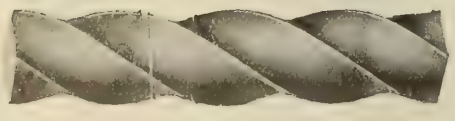

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VOL. 17. TORONTO, MONTREAL — JULY 18, 1906 — WINNIPEG, VANCOUVER No. 20

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The Royal Institute of British Architects, London.

Examination for Admission as Associate.

An examination for admission as Associate of the Royal Institute of British Architects, London, will be held in Toronto, from the 16TH to 23RD of NOVEMBER, 1906.

Full particulars and all information regarding this examination can be had by applying to F. S. Baker, Honorary Secretary for Canada, Mail Building, Toronto.

SIDEWALKS

Tenders will be received by the undersigned up to the 25TH INSTANT, for making at least 1,000 yards of Cement Sidewalks in this Village.

WM. MILLAR,
Clerk.

Dated at New Hamburg, July 10th, 1906.

Tenders Wanted

Sealed tenders will be received by the undersigned up to 7 o'clock p. m. on FRIDAY, THE 27TH DAY OF JULY, 1906, for constructing tar, gravel and plank sidewalks in the town of North Toronto, County York, as per plans and specifications which can be examined at the Town Hall and specially at sight of Walks from five to six o'clock p. m. on Saturday, the 21st day of July, 1906. The Town Engineer to be present to explain as to same.

Tenders to be at a rate per lineal foot for the 4 feet in width, to include lanes, private entrances and road crossings.

A certified cheque for $25 to accompany each tender to be payable to the undersigned which will be returned when the successful tenderer enters into contract with the Town.

The lowest or any tender not necessarily accepted.

Write on outside, tender for sidewalk.

(Signed) W. J. DOUGLAS,
Clerk and Treasurer
Town North Toronto

Eglinton, P.O., County York, 16th July, 1906.

CITY OF SASKATOON

Province of Saskatchewan

TENDERS FOR WATERWORKS, SEWERAGE AND ELECTRIC EQUIPMENT

Tenders will be received by the Secretary-Treasurer of the City of Saskatoon, Sask., until 8 p. m. on

TUESDAY, AUGUST 14TH, 1906

for the following works:

Contract "A"—Labor pipelaying on waterworks and sewers.
Contract "B"—Power house and chimney.
Contract "C"—Water tower and foundation.
Contract "D 1"—Cast-iron pipes and specials.
Contract "D 2"—Wooden stave pipe.
Contract "E"—Fire hydrants, valves, etc.
Contract "F"—Sewer pipes and junctions.
Contract "G"—Pumping machinery.
Contract "H"—Boilers.
Contract "J"—Electric light engine.
Contract "K"—Electric lighting equipment.

Plans and specifications may be seen at the office of the Chief Engineer, 103 Bay street, Toronto, Ont., or at the office of the Secretary-Treasurer, Saskatoon, Sask. No tender necessarily accepted.

JAS. CLINKSKILL, ESQ., Mayor, Saskatoon, Sask.; ADAM TURNER, ESQ., Secretary-Treasurer, Saskatoon, Sask.; WILLIS CHIPMAN, C. E., Chief Engineer, 103 Bay street, Toronto, Ont.

THE PROVINCE OF SASKATCHEWAN

DEPARTMENT OF PUBLIC WORKS

TENDERS FOR THE SUBSTRUCTURE

Of Traffic Bridge at Battleford

Sealed tenders addressed to "The Deputy Commissioner of Public Works, Regina, Sask." and endorsed "Tenders for Battleford Bridge" will be received up to 4.30 p. m., MONDAY, AUGUST 13TH, 1906, for the supply of all material and the construction of eight (8) concrete piers and two (2) abutments for a traffic bridge over the Saskatchewan River at Battleford.

About 5 000 cubic yards of concrete will be required in the work.

A certified cheque for the sum of $4,000 must accompany each tender. The cheque will be retained until the necessary contract and bond are executed and the work commenced.

The cheques of unsuccessful bidders will be returned after the contract is signed.

The right is reserved to reject any or all bids or waive any defects.

Plans, specifications and all information may be obtained on application to the undersigned.

Dated at Regina, Sask., June 29, 1906.

F. J. ROBINSON,
Deputy Commissioner of Public Works

TENDERS

will be received by the undersigned up to WEDNESDAY, THE 1ST DAY OF AUGUST, for building an Iron Bridge (with stone or concrete abutments) over Big Creek, in the Township of Onondaga, in the County of Brant. Specifications can be seen at the Clerk's office in the Village of Middleport.

S. J. McKELVEY,
Clerk.

Tuscarora, P. O., July 9th, 1906.

PORT ELGIN WATER WORKS

Sealed tenders will be received by the Village Clerk until 8 p. m. on

TUESDAY, JULY 24TH, 1906,

for the construction of a system of Water Works for the Town of Port Elgin.

The works will be subdivided as follows:

Contract "A" Labor on Pipelaying, about 14,000 feet.
Contract "B" Pump House.
Contract "C" Water Tower and Foundation.
Contract "D" Cast Iron Pipes and Specials.
Contract "E" Fire Hydrants and Valves.
Contract "G" Pumping Machinery.
Contract "H" Boilers.
Contract "I" Well and Gallery.

Plans and specifications may be seen at the Town Hall, Port Elgin, or at the office of the Chief Engineer, Toronto, on or after July 6th, 1906

D. GEDDES, Esq., Reeve, Port Elgin, Ont.
R. MUNRO, Esq., Village Clerk, Port Elgin, Ont.
WILLIS CHIPMAN, Esq., C. E., 103 Bay Street, Toronto, Ont.

DEBENTURES FOR SALE

TOWNSHIP OF DERBY - COUNTY OF GREY

Sealed lump tenders will be received by the undersigned up to 3RD AUGUST, 1906, at 6 o'clock p. m., for the purchase of Drainage Debentures of the following description: Twenty of $156.33 each, including both principal and interest, payable at the Traders Bank in the Town of Owen Sound on the 10th day of December in each year, the first to fall due on the 10th day of December, 1907, and the last on the 10th day of December, 1926. The Debentures will be deposited in the said Bank and delivered on the receipt of the purchase price in a lump sum on or before the 31st day of August, 1906.

For further particulars apply to the Township Solicitors, Messrs. MacKay, Sampson & Telford, Box 290, Owen Sound, or to

WILLIAM BEATON, Tp. Clerk.
Township of Derby, Box 39, Kilsyth, Ont.

[FOR ADDITIONAL ADVERTISEMENTS FOR TENDERS SEE NEXT PAGE.]

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TO CONTRACTORS

Tenders, separate or bulk, will be received by the undersigned up to noon of JULY 30TH, for the several trades works required in the rebuilding of Christ Church, Tyendinaga Indian Reserve, near Deseronto, for the Interior Department, Ottawa.

Plans and specifications may be seen on and after the 20th inst. at the offices of the undersigned, Belleville, the Rectory, Deseronto and Power & Son, architects, Merchant's Bank Chambers, Kingston.

The lowest or any tender not necessarily accepted.

AYLESWORTH, ESQ., Indian Agent,
County Buildings, Kingston, Ont.

CONTRACTS OPEN.

RED DEER, ALTA.—E. Michener intends building a business block here.

WEYBURN, SASK.—W. H. Hunt intends erecting a new post office this season.

VICTORIA, B. C.—W. H. Gee has purchased a site near Oak Bay ave., for residence.

MAGOG, QUE.— Improvements are to be made to the waterworks system to cost $8,000.

REVELSTOKE, B. C.—R. Howson is preparing plans for a business block to cost $40,000.

ST. JOHN, N.B.—J. F. Williamson will build a machine shop next to the Court block.

STANSTEAD, QUE.—The Council have decided to construct a new lock-up and fire station.

COBALT, ONT. — Some Arizona capitalists are considering the erection of a smelter here.

NORTH BATTLEFORD, SASK.—The C.N.R. will erect a large freight warehouse here.

ARROWHEAD, B.C. — Preparations are being made to rebuild the stores recently burned here.

AMHERST, N.S.—N. A. Rhodes and W. A. Fillmore will erect a large brick block on Church street.

STRATHCONA, ALTA. — Tenders have been taken for erection of a residence for J. J. Duggan.

GYPSUMVILLE, MAN.—The Manitoba Gypsum Co., purpose rebuilding their mill recently burned.

DAUPHIN, MAN. — D. C. McKinnon is having plans prepared for a large hotel building on Main street.

MANOR, SASK. — The Northern Bank have made preparations for erection of a two storey brick building.

OSHAWA, ONT.—Tenders will soon be called for the construction of a steel bridge with concrete abutments.

CHATHAM, ONT. — Tenders will soon be called for repairs and renovations of Central and McKeough schools.

ROSTHERN, SASK.—A by-law has been carried to raise $3,000 for improvements, etc., for the fire department.

PETERBORO, ONT.—It has been decided to locate one of the Provincial Normal schools here, cost $50,000.

ADAMSVILLE, N.B.—R.A.Frechet, architect, Moncton, will receive tenders up to July 21st for erection of a church here.

ODESSA, ONT.—Mrs. Geo. J. Ham, of Mexico City, intends donating $1,000 towards a new public library building here.

SHOAL LAKE, MAN.—On July 21st a by-law will be voted on to loan $15,000 to Randall & Greenshaw to erect a flour mill.

PORTAGE LA PRAIRIE, MAN.—A by-law will be voted on August 7th to raise $50,000 for sewage and water system.

CHESLEY, ONT. — The Provincial Board of Health have approved of the plans for the water system here, cost $30,000.

OAKVILLE, ONT.—By-laws will be voted on August 10th for raising $40,000 for waterworks and $10,000 for electric light plant.

WOLSELEY, SASK.—E. C. Brown will receive tenders up to August 1st for purchase of $20,000 five per cent debentures.

HUNTSVILLE, ONT.—The Council gives notice of its intention to construct sewers in Main street, from Lorne street to Muskoka river.

TREHERNE, MAN. — Hooper & Walker, architects, Winnipeg, have taken tenders for erection of a brick school house here.

VERMILLION, ALTA.—The Methodist congregation will build a church to cost $3,400.—Price & Prentice purpose building a hotel here.

OWEN SOUND, ONT.—The First Methodist church will erect a Sunday school building, near corner of St. Vincent and Douglas streets.

STRATHCONA, ALTA. — A. T. Mode will receive tenders up to September 4th for purchase of $15,000 five per cent. school debentures.

LYN, ONT. — B. Dillon, architect, Brockville, will receive tenders up to July 21st for erection of an addition to Anglican church rectory.

BARRINGTON, N. S.—A.H. Doane, Municipal Clerk, will receive tenders up to August 10th for purchase of $6,000 four per cent. debentures.

CARBERRY, MAN. — Geo. Balfour will receive tenders up to July 23rd for cast iron water pipe and special castings, fire hydrants and gate valves.

ST. LAMBERT, QUE.—Tenders will be received up to July 21st, for erection of a town hall. A. Verne, architect, 15 St. Lawrence boulevard, Montreal.

BRACEBRIDGE, ONT. — G. R. Jones, Town Engineer, will receive tenders up to July 23rd, for construction of 30,000 square feet cement sidewalk.

GLACE BAY, N.S.—The Dominion Coal Company are preparing plans for a wharf along the harbor, and a spur of railway from No. 2 colliery to the harbor.

REGINA, SASK. — The Dominion Bank purpose building a three-storey building here. — John Gunn & Sons, Winnipeg, will build a large warehouse here.

CHILLIWACK, B.C.—N. F. Mackay Deputy Commissioner of Lands and Works, Victoria, has taken tenders for the erection of a two-storey school building here.

CALGARY, ALTA. — H. E. Gills, City Clerk, is this week receiving tenders for construction of concrete sidewalks in the city, also for construction of watermains.

GODERICH, ONT. — The Town Council gives notice of its intention to construct cement sidewalks on Colborne, St. Patrick, Hamilton, Trafalgar and Bruce streets.

DUNDAS, ONT.—Tenders will be received up to July 21st for heating of post office. Applications to be made to R. T. Wilson, or to A. W. Peene, architect, Hamilton.

DUNNVILLE, ONT.—The Dunnville, Wellandport & Beamsville Electric Railway Co., purpose building a line from this town to Lake Ontario. J. D. Bennett, Beamsville, is a director.

VICTORIA, B.C. — W. W. Northcott, Superintendent of Public Works, has taken tenders for alterations and additions to Oaklands fire hall, also for repairs to city hall and market.

STRATFORD, ONT.—It is stated that a Normal school will be established here, cost $50,000. —The proposed by-law for extension of city waterworks at cost of $18,000 has been approved.

BRANTFORD, ONT. — Building permits have been issued to S. Hartley, for a brick house on Pearl street, cost $1,400; and E. Tanton, for brick dwelling on Duke street, cost $1,800.

HALIFAX, N.S.—The City Engineer has recommended the construction of permanent sidewalks on Hollis, Barrington, Pleasant, Bishop, Sackville and Prince streets and Bedford row.

PRINCE ALBERT, SASK.—The C. N. R. intend erecting a station here to cost $12,000.—Tenders have been taken by Geo. Will for erection of a mill building for Farmers' Milling and Elevator Co.

LETHBRIDGE, ALTA.—Plans for the new C.P.R. bridge over the Belly river have been completed.—W. Oliver will erect a two story brick block on Round street, next to the Dallas Hotel.

MONCTON, N.B.—C. H. La Billiois, Department of Public Works, Fredericton, will receive tenders up to August 6th, for metal superstructure for Halls Creek bridge. Plans at the Department.

BRANDON, MAN. — W. A. Elliott has taken tenders for plumbing and steam-heating in Ladies' Building, Brandon College.—The Brandon Machine Works Co. have decided to begin at once to erect their new offices and warehouse.

MEDICINE HAT, ALTA.—The C. P. R. intend building a large repair shop here, also enlarging the round house.—Tenders have been taken for erection of a brick and cement block warehouse for North West Jobbing and Commission Co.

CROSS POINT, QUE.—F. Gelinas, Department of Public Works, Ottawa, will receive tenders up to August 2nd, for building an extension to wharf. Plans at the Department, with Postmaster here, and with Ph. Beland, Post Office building, Que.

NORTH BAY, ONT. —This town has been chosen as the location for one of the new Normal schools. F.R. Heakes, Provincial architect, has prepared plans, cost $50,000.—The Montreal Reduction & Smelting Co. have purchased a site for a smelter.

PORT COLBORNE, ONT.—L. K. Jones, Department of Railways and Canals will receive tenders up to August 15th, for erection of an 800,000 bushel elevator. Plans with Chief Engineer at the Department and with J. A. Jamieson, Board of Trade building Montreal.

WELLAND, ONT.—Dietrick & Kennedy will receive tenders up to 18th inst. for erection of a house for G. R. Boyd.—L. K. Jones, Department of Railways and Canals, will receive tenders up to July 26th for construction of a turning basin and dock. Plans with Superintending Engineer, St. Catharines.

ST. JEAN, I. O. QUE.—F. Gelinas, Department of Public Works, Ottawa, will receive tenders up to July 27th for an extension to wharf here. Plans at the Department or with Postmaster here,

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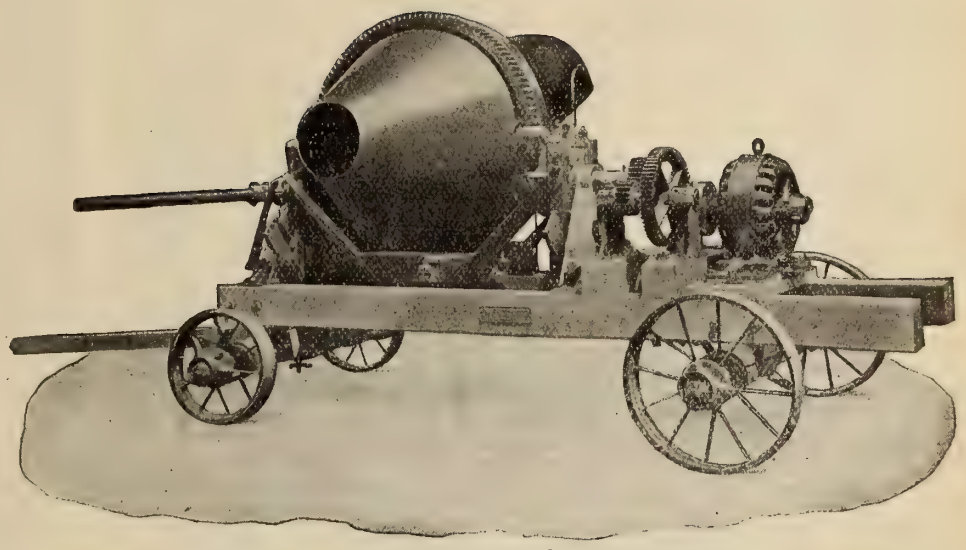

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KAMLOOPS, B.C.—N. F. Mackay, Deputy Commissioner of Lands and Works, Victoria, has taken tenders for erection of a school building at Canoe creek. — The Norma Mines, Limited, Vancover, will receive tenders up to 23rd inst. for sinking a shaft etc. at their claim on Coal Hill. Plans with E. F. Appelbe.

PORT ARTHUR, ONT.—H. Simpson, architect, Toronto, is preparing plans for an eight roomed school building.—The International Harvester Co. purpose erecting a large warehouse here. —J. W. Morgan will receive tenders up to July 25th for plumbing and heating of the new ward school. Plans with H. Simpson, 17 Toronto street, Toronto.

QUEBEC, QUE. — The Frontenac Gas Company have completed arrangements for installing their new gas plant here.—The Dominion Parliament, in their supplementary estimates, have made the following appropriations for this city: Drill shed for school of gunnery, $10,000; immigrant buildings, $5,000; immigrant hospital, $30,000; main store building at arsenal, $7,000.

SASKATOON, SASK.—Mark Bros. will build a store on First avenue.—A. Turner will receive tenders up to August 14th, for pipelaying on waterworks and sewers, power house and chimney, water-tower, cast-iron pipe and specials, wooden stave pipe, fire hydrants, sewer pipe, pumping machinery, boilers, electric light engine and equipments. — Plans with above and with W. Chipman, 103 Bay street, Toronto.

EDMONTON, ALTA. — The Dominion Parliament have appropriated $200,000 for public buildings here.—The following building permits have been issued: Brackman-Ker Company, block on Jasper avenue, cost $12,000; J. A. Hallier, dwelling, Eighth street, cost $4,000; Mr. Fife, residence, between Hardisty and Saskatchewan avenues, cost $2,600; A. Dodge and F. J. Dodge, three dwellings, Short street, cost $1,200 each; Revillon Bros., warehouse, College avenue, cost $1,200.

GANONOQUE, ONT.—The following building permits have been issued: Mitchell & Wilson, two-storey frame dwelling, corner William and King streets; Joseph Dempster, two-storey cement building for livery and office, King street; Hugh Wilson, continuation of two-storey brick tenement block, Charles street; Hugh Wilson, two-storey brick dwelling, Pine street; W.G. Rogers, two-storey brick block, King street.

MONTREAL, QUE.—It has been decided to call for new tenders for No. 5 station.—The Dominion Government has decided to erect a new gaol building.—Building permits have been issued as follows: J. J. M. Pangman, residence, Ontario street, $20,000; Robert Loring, 2-storey residence, McGregor street, $15,000; H. J. Fuller, 3-storey residence, McGregor street, $15,000; Montreal Steel Works, warehouse, 208 St. Etienne street, Point St. Charles, $14,800; N. Naud, two houses, Delorimier street, $5,000; Henry Birks & Sons, five-storey sandstone building, corner Phillips square and Cathcart street, $150,000.

OTTAWA, ONT.—The Council gives notice of its intention to construct tar macadam pavement on Sweetland avenue from Laurier to Osgoode street and on Laurier avenue from Elgin to Percy streets.—It is reported that the Coventry Ordinance Works will establish a factory near this City for manufacture of artillery field guns, etc.—Building permits have been issued as follows: U. Carrisse, separate school building, Empress street, $15,000; Miss E. Lepage, three brick veneered dwellings, Daly avenue, $4,200; R. A. Daly, solid brick house, Daly avenue, $8,000; James Davidson, brick veneered dwelling, Maple street, $1,700; James Davidson, there brick veneered dwellings, Maple street, $3,300; George Ramsay, brick veneered dwelling Arthur street, $2,800; Alex. Gamble, brick veneered dwelling, Cooper street, $2,600.

LONDON, ONT. — The Crandall Cutlery Co., of Bradford, Penn., is looking for a site for a factory here.—Building permits have been issued as follows: N. Linder, brick house on Maitland street; Frank Elson, cement and brick residence on the Cove road; Mr. Webster, brick-veneer residence, on Grosvenor street; A. E. Christie, residence on Hellmuth avenue; R. Angus, two-storey brick residence, corner William street and Princess avenue; R. H. Welburn, two-storey brick-veneer residence, 522 William street; H. J. Clarke, frame dwelling on Walnut street; George Buck, brick-veneer residence, corner Nelson and Maitland streets; J. D. Long, brick-veneer cottage, Richmond street.—Tenders for construction of new Chalmers Church will be received up to July 23rd. —A. O. Graydon, City Engineer, will receive tenders up to 19th inst. for construction of asphalt pavement on Park ave., between Queen's ave. and Dundas street.

VANCOUVER, B.C. — Hooper & Walker, architects, have completed plans for a four-storey block, corner Hastings street and Columbia avenue, for A. W. Vowell. — A. McEvoy, City Clerk, has taken tenders for 3,000 feet of fire hose.—The following building permits have been issued: J. & F. Robertson, frame dwelling, Princess street, $1,200; Mrs. Ridley, frame dwelling, Barnard street, $2,400; Mrs. Z. Z. Kerr, frame dwelling, Barclay street, $2,700; Mrs. M. T. Edwards, frame dwelling, Haro street, $3,300; John Coville, frame dwelling, Eighth avenue, $1,500; F. A. Round, dwelling, Albert street, $1,600; Carl Johanson, dwelling, Seventh avenue, $1,600; Robert Gibson, frame dwelling, Hamilton and Davie streets, $2,700; Jas. Dugan, dwelling, Fifteenth avenue, $1,800; Jas. Borland, brick addition, Princess street, $5,500; S. A. McLeod, dwelling, Sixth avenue, $2,500; E. Zearn, dwelling, Eighth avenue, $2,000.—The City Clerk will receive tenders up to August 1st for supply of cast-iron pipe for the city.

HAMILTON, ONT. — Tenders will be received by Thos. E. Hillman, C.E., Hamilton Provident & Loan Building, up to July 27th, for construction of electric railway between this city and Galt, and this city and Guelph.—The Hamilton Bridge Works Company purpose building a large addition to their plant at an early date.—The congregation of Central Presbyterian church will have plans prepared for rebuilding their church.—The Canadian branch of the Berlin Company, of Beloit, Wis., have secured a site on which they will erect ten buildings.—The Chairman of the Board of Education has been officially notified that a normal school will be built here, cost $50,000.—The City Council gives notice of its intention to construct cement walks on Bold, Caroline and Peter streets, also pipe sewers in Peter and King streets.—It has been decided to erect a new Y.W.C.A. building on the site of the present one, to cost about $50,000.—Building permits have been issued as follows: James Byers, two brick houses, Burris street, $4,000; B. Leeming, frame cottage, Hannah street.

WINNIPEG, MAN. — S. Mulvey, Secretary School Board, will receive tenders up to July 24th for purchase of $200,000 four per cent. school debentures.—H. B. Rugh, architect, has taken tenders for erection of a residence in Crescentwood, for J. Suckling. Same architect will receive tenders up to July 25th for a building for Keeley Institute, Fort Rouge.—B. M. Fraser is arranging to erect a house on Bannatyne avenue, to cost $3,000.—A residence will be erected on Victor street, for Johnson & Blondal, cost $4,000.—A residence will be erected on Corona street, for C. S. Macdonald, cost over $3,600.—A. N. Macdonald will build additions to his horse shoeing shop at 309 Elgin avenue, cost $8,000.—C. McKenzie will build a residence on Colony street, cost $4,000. —A residence will be erected at 659 William avenue, for G. Thomas, cost $4,000.—W. A. Kemp is to have a residence built on Spence street, cost $3,000. —Mrs. Wade Forrson has had plans prepared for three houses, to be erected in Rosedale, to cost $9,600.—A residence for S. Bjornason will be erected at 433 Toronto street, cost $3,500.—Plans have been prepared for the erection of a residence on Ethelbert street, for J. Manley, cost $3,500. — It is estimated that a supply of hose costing $8,000 will be required for the fire department.—The Works Committee have taken tenders for 20,000 barrels of cement, also for construction of a number of granolithic walks, sewers and pavements.—Darling & Pearson, architects, will receive tenders up to July 27th for building for Imperial Bank, corner Main street and Bannatyne avenue.—A residence will be built on Wardlow avenue, for A. G. Hopkins, cost $4,500.—A residence is to be erected for A. McDonald on Furby street, cost $4,000.—A residence will be built for W. Fleming on Langside street, cost $3,000.

TORONTO, ONT.—A. G. Strathy & Co., real estate brokers, will erect a laundry building at 311 College street.—The same dealers have sold sites on which residences will be erected as follows: Lot on Hamburg ave., north of Main street, to Mrs. J. Pinkham; lot on Brunswick ave., north of Bloor street, to Thos. H. Scarfe, lot on Yonge street, to W. Muston; lot No. 147 Elizabeth street, to Louis Rottenberg.—H. Simpson, architect, is taking tenders for alteration to Little York Hotel.—Same architect is preparing plans for an eight-roomed school building in Port Arthur.—Mr. Simpson has also been instructed to prepare plans for an apartment house in Parkdale.—The property committee and executive council will select a site for new O.C.P.S. building.—S. B. Coon, architect, has taken tenders for erection of residence on Litz ave.—Jarvis street Baptist congregation have decided to erect a mission church on Pape ave., near Queen street, to cost $4,000.—F. S. Baker, architect, is preparing plans for two houses on Binscarth road and one on Liszt ave., also for large departmental store and a warehouse.—Same architect will call for tenders for erection of a residence on Roxborough street east.—Tenders will soon be called for the new public library, corner St. George and College streets.—The Miller Cartage Co., have bought a site, corner Christie and Dupont streets, for large storehouse, office and stables.—Tenders will be received up to 19th inst. for enlargement of Grace church, corner Gore Vale and Arthur streets. Plans with J. W. Peter, 127 Lippincott street. —The following building permits have been issued: R. Watts, 2-storey and attic brick and stone dwelling, Rusholme road, cost $3,800; P. Maher, 2-storey brick driving shed, 24-26 Hayden street, cost $10,000; H. Stevens, pair 2-storey brick dwellings 30-32 Macdonell avenue, cost $5,000; H. H. Suydam, 2-storey and attic brick dwelling, Spadina road, cost $4,700; Alex. Smith, 2-storey brick-

veneer dwelling, Emerson avenue, cost $2,500; Brunswick-Balke-Collender Co., 1-storey brick storehouse, Pacific avenue, cost $2,500; E. D. Brown, 2-storey and attic brick dwelling, Oriole road, cost $7,500; T. A. Russell, 2-storey and attic brick and stone dwelling, 160 Walmer road, cost $4,775; Albert Maas, 2-storey and attic brick dwelling, Walmer road, cost $4,500; Traders Bank, 3-storey brick and stone addittion to bank, corner Avenue and Davenport roads, cost $3,000; M. Courtemanche, two 2-storey brick dwellings, Grace street, cost $4,500; Toronto Y.M.C.A. 2-storey brick and stone gymnasium, 17 McGill street, cost $5,500, Chas, Coutts, pair 2-storey brick dwellings, Garden avenue, cost $4,600; Arthur Pinel, pair 2½ storey brick dwellings, Grace street, cost $5,000, W. W. Hiltz, pair 2½-storey brick dwellings, Sparkhall avenue, cost $5,000; Jas. Laing, 2-storey and attic brick dwelling, Lynd avenue, cost $2,500; H. S. Mara, three 3-storey brick dwellings, corner College and Grace streets, cost $9,000; Mrs. Harry Halls, 2-storey and attic brick dwelling, Howard Park avenue, cost $4,000; M. F. Thompson, pair 2-storey and attic brick and stone dwellings, Beatrice street, cost $5,000; H. Larkin, 2-storey brick and stone dwellings, Erinbridge street, cost $4,000; Board of Education, 3-storey and basement brick and stone Collegiate Institute and Gymnasium, Jamieson avenue, cost $34,000; H. Greisman, pair 2-storey and attic brick dwellings, University avenue, near Agnes street, cost $6,000; A. R. Williamson, 3-storey brick apartment house, near corner Esther street and Grange avenue, cost $14,000; R. B. Burkell, three 2-storey and attic brick dwellings, Shaw street, near Arthur, cost $7,000; T. Gibson, four 2-storey brick dwellings, Lansdowne avenue, near Bloor street, cost $8,000; C. O'Neil, 2-storey brick and stone dwelling, Boustead avenue, cost $2,800; Thos. Thompson, pair 2-storey and attic brick dwellings, 195-7 Bolton avenue, cost $4,500; Hudson Bros., 2-storey brick and stone dwelling, St. Clarens avenue, near Bloor street, cost $3,500; F. W. Phillips, 2-storey brick dwelling, Westmoreland avenue, cost $2,500; John Kee, three 2-storey brick and stone dwellings, Abbott avenue, cost $7,500; J. W. Butchart, 2-storey brick and stone dwelling, Barrett avenue, cost $2,200; National Club, 5-storey brick and stone club, Bay street, near King, cost $115,000.

FIRES.

Cataract sub-station at Grimsby, Ont., totally destroyed, loss $25,000.—The mill of the Manitoba Gypsum Co., at Gypsumville, Man., was totally destroyed.—Flour mill of John Lee, at Arcola, Sask., loss $20,900.—Five-storey building, 16 Cote street, Montreal, loss $75,000.—Four buildings at Stafford, Alta., loss $5,000.—Store of Mr. McLeod at Beaver, Man., loss $7,000.—Art store of R. R. Bland, London, Ont., damage $4,000.—

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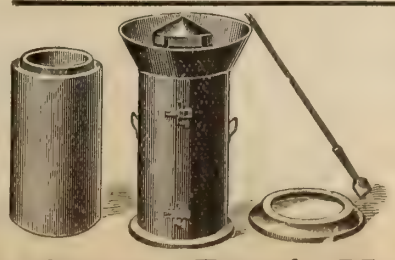
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Engine shed of Bay of Quinte Railway at Tweed, Ont., completely destroyed.—Building occupied by L. Bolduc & Co., confectioners, Lachine, Que., loss $4,000.—Queen's Medical College, Kingston, Ont., loss $70,000.—Lumber sheds of H. Fanteaux, Fanteaux ave.. St. Cunegonde, Que., loss $7,000. — Windsor Hotel, Montreal, damage $10,000 — Holston's sash and door factory, 937 Logan ave., Winnipeg, loss $14,000.

CONTRACTS AWARDED.

PETERBORO, ONT. — Construction of sewers: R. Sheehy, contractor, at $9,095.

CARDSTON, ALTA. — $30,000 town debentures: J. W. Nay, Regina, purchaser.

NORTH SYDNEY, N.S. — Construction of concrete sidewalks: C. A. Lowe, contractor.

WELLAND, ONT.—New business block for Goodsir & Waite: M. Vanderburg, contractor.

SYDNEY MINES, N.S.—Erection of new town hall: A. Beaton, North Sydney, contractor.

MONCTON, N. B.—Planing mill for I.C.R.: Rhodes, Curry & Co., Amherst, N. S., contractors.

GODERICH, ONT.—Construction of cement sidewalks: W. J. Anthistle, London, contractor.

LONDON, ONT.—Building on Rectory street for Geo. White & Sons: R. G. Wilson, contractor.

VICTORIA, B. C. — Enlargement of Union Club building: Thomas Catterall, contractor, cost about $4,000.

MOOSE JAW, SASK.—$10,000 school debentures: National Trusts Co., successful tenderers, for $10,410.

AMHERST, N. S. — Construction of permanent sidewalks: Warren Bitulithic Paving Co., at $2.75 per square yard.

BRANDON, MAN.—Erection of Brobridge block on Eleventh street, McDougall & Ireland, contractors, cost $25,571.

FREDERICTON, N.B.—5,000 barrels of English cement for The Maine & N.B. Electrical Power Company: J. S. Neill, contractor.

CRANBROOK, B. C.—Business block for the Fink Mercantile Co.: Kerr & Campbell of Fernie, contractors. Cost about 20,000.

OTTAWA, ONT.—Construction of C. N. R. branch from this city to Hawkesbury, 55 miles: J. T. Schell, M.P., Glengarry, contractor.

CLARESHOLM, ALTA.--Construction of water works: J. E. Woods, Pincher Creek, contractor.—.—Erection of hotel: Mr. Malcolm, contractor, cost $16,000.

STRATFORD, ONT.—Construction of two bridges on the Oxford-Perth town line: Steel work, J.A. Vance, of New Hamburg; cement floors and abutments, J. Duval, Tavistock.

SASKATOON, SASK.—Store building for J. Clinkskill: Hoge & Thompson, contractors.—$30,000 five per cent. debentures: National Trust Co., successful tenderers, for $30,674.

ST. CATHARINES, ONT.—Construction of sewers on Clark and Niagara streets, City Engineer, contractor.—Laying of asphalt block pavement on Church street, Langley & Cook, contractors, cost $30,851.82.

ST. STEPHEN, N. B.—Power plant and supplies for water system: Steel bars for concrete work, Portland Rolling Mills, St. John; iron gates, Rensslaer Valve Co., Troy, N. Y.; special castings, Montreal Pipe Foundry Co., Londonderry, N. S.; pumping plant, Olds Gas Producer Co. Cost $26,350.

EDMONTON, ALTA.—Installation of water mains: Shannon & Graham, successful tenderers, at $11,334.—Taylor, Bouchier & Peters have secured the following contracts: Concrete trunk sewer along Rat creek, cost $162,556; concrete sewer on Mackenzie avenue, cost $17,925; pipe work in sub-mains, $12,485.

WINNIPEG, MAN.—Grain elevator at Point Douglas for Canada Paint Co.: Northern Construction Co. — Frontenac apartments: Masonry, W. Griffiths; carpentry, J. E. James; painting and glazing, J. A. Payne; electric wiring, Shipman Electric Co., cost $54,500. — St. Pauls church: Northern Construction Co., successful tenderers, cost about $50,000.—Icelandic Good Templars' Lodge: Masonry, Sveinn Brongorfsson; electric work, Mr. Hudson; plumbing, C. L. Robb.

GUELPH, ONT.—Two storey brick house, corner Glasgow and Kent streets, for City Treasurer Scroggie: Masonry, S. Rundle; carpentering, Hebden & Johnston; plastering J. J. Mahoney; painting, Dennis & Moore; plumbing, Mahoney Bros.; heating, H. Occomore; tinsmithing, W. Sunley. McPhie & Mahoney, architects.—Enlargement of greenhouse at Ontario Agricultural College: Superstructure, King Construction Co., Toronto; sub-structure, Guelph Cement, Brick & Paving Co., cost about $5,000.

DELHI, ONT.—Tenders were received by John S. Fielding, C.E., consulting engineer, 15 Toronto street, Toronto, for concrete dam for the Delhi Light & Power Co. as follows: Jenks & Dresser, $23,094; John C. Webb, $21,925; Frazer & Eichle, $18,886.11; D. McDermid, $17,556.75; O. D. Oatman, $16,414.50; A. C. Stewart & Co., $15,864.20; David Chalmers, $15,100.30; Patterson, Ellis & Whelehan Co., $15,231; Brantford Building & Paving Co., $14,949; A. E. Oakley & Co., $12,730.65; A. Winger & Son, $12,700. The contract was awarded to A. Winger & Son.

TORONTO, ONT. — Residence in Rosedale for T. Rennie: Carpentry, J. McKenzie; brickwork, R. Chalkley & Son.—Residence on Bedford road for H. E. Bydwell: Brickwork, R. Chalkley & Son; carpentry, R. J. Batt.—Residence on Admiral road for J. D. Prentis: Brickwork, A. Davidge; carpentry, J. Hoops.—Residence on Broadview avenue for A. E. Walton: Carpentry, T. D. Liddell; brickwork, Chas. Bully. H. Simpson is architect of the above named buildings.—Traders Bank building, corner Bloor and Yonge streets: Masonry, Wickett Bros.; steel work, Locomotive Machine Co., Montreal; carpentry, Walker & Robertson; fire-proofing, Expanded Metal Co.; plastering, Dancy Bros.; ornamental iron works, Canada Foundry Co.; marble work, McIntosh & Gullett; plumbing and heating, Purdy, Mansell & Co.; tinsmithing and roofing, A. B. Ormsby & Co.; painting, Jos. McCausland & Son. F. S. Baker, architect.—Residence on Walmer road for A. Maas: Masonry, Connery & Hillman; carpentry, Moir & McCall; plastering, A. J. Madden; plumbing and heating, J. W. Oram. F. S. Baker, architect.—Constructing & Paving Co. have secured the contracts for the following asphalt pavements: Broadview avenue, Gerrard street to Danforth avenue, cost $29,334; Queen street, Niagara to Gladstone, cost $28,885; Queen street, Gwynne to Roncesvalles avenues, cost $28,667; Delaware avenue, Bloor street to Shanley avenue, cost $4,985.

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JUNE BUILDING OPERATIONS.

In Toronto, for the month of June there were 571 building permits issued, the estimated value of which is $1,350,142. This makes a total of $6,195,470 for the first six months of this year, showing an increase of $1,701,144 in value of buildings erected, as compared with the same period of last year.

In Montreal, there were 166 permits for new buildings granted, of an estimated value of $2,343,579. For alterations 55 permits were issued, valued at $72,585. The estimated value of buildings erected there up to the end of June totals $4,990,375, showing an increase of $2,126,536 over last year.

In Winnipeg, there were 416 building permits issued valued at $1,285, 250. This shows a decrease of $739,150 as compared with June of 1905.

In Hamilton the value of buildings for which permits have been taken out for the first six months of 1906 is $760,000, an increase of about $30,000 over the record of the same period last year.

In Vancouver permits were issued in June to the value of $296,000, whereas in June of 1905 their value was $131,500.

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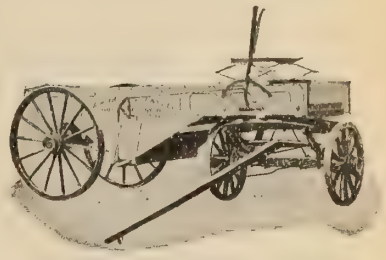

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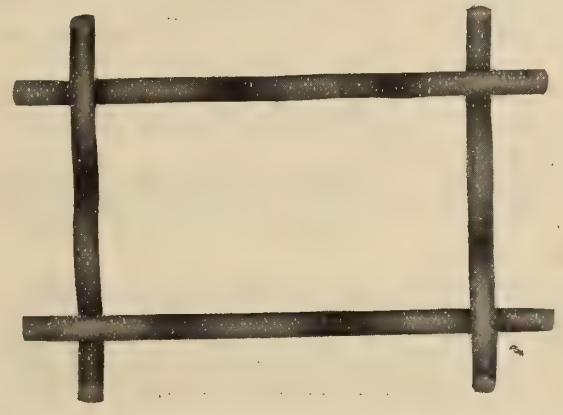

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Clark Automatic Nut-Lock Company, Limited, Montreal, incorporated, capital $500,000. Promoters, J. D. Good, E. James and others.

Para Construction Company, Limited, Toronto, incorporated, capital $2,000,000. Promoters, J. S. Lovell, W. Bain and others.

Peterborough Lumber Company, Limited, Peterborough, Ont., incorporated, capital $40,000. Directors, G. Lenton, J. Thompson and D. Davidson.

Howard Cooperage & Lumber Company, Limited, Ridgetown, Ont., incorporated, capital $30,000. Directors, D. A. Leitch, A. Leitch and others.

Berlin Building & Supply Company, Limited, Berlin, Ont., incorporated, capital $40,000. Directors. J. A. Lang, H. Krug and others.

Amalgamated Cobalt Mines, Limited, Toronto, incorporated, capital 1,000,000. Directors, G. M. Clark, T. C. Russell and E. M. Lindsay.

Wabi Cobalt Silver Mining Company, Limited, Cobalt, Ont., incorporated, capital $500,000. Directors, J. R. Gamble, T. Langton and others.

Cobalt Diamond Drilling & Development Company, Limited, Toronto, incorporated, capital $50,000. Directors, S. Jenkins, D. Ponton and G. J. Ashworth.

Supreme Heating Company, Limited, Owen Sound, Ont., incorporated, capital $200,000. Directors, S. J. Parker, A. J. Ross and others.

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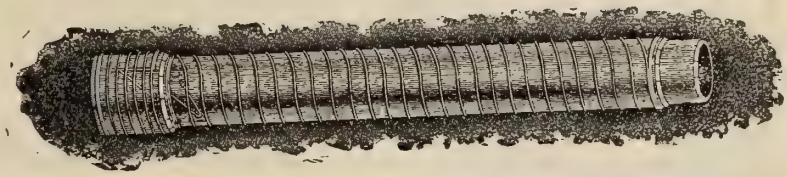

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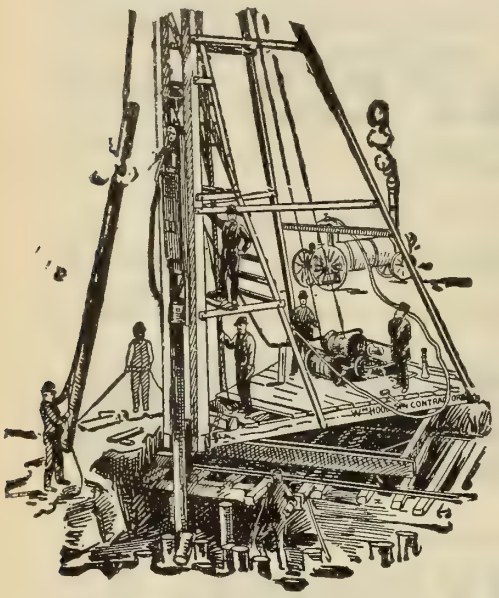

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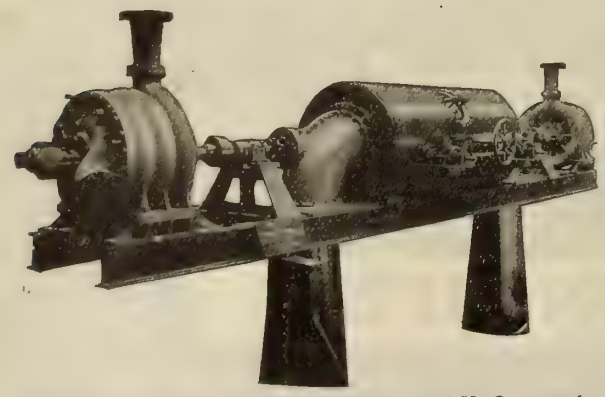

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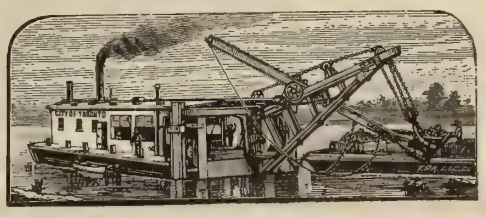

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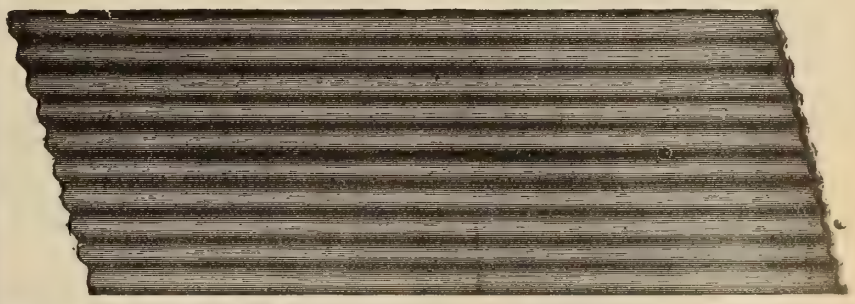

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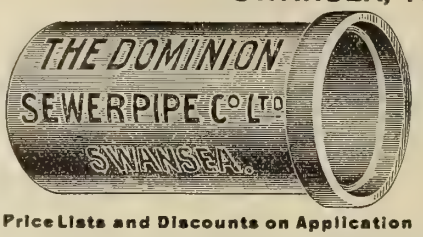

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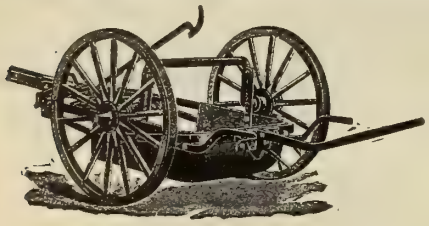

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BY

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Note the High Grade of National. Compare it with others.

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							Neat.					3 (Sand) to 1 (Cement)				
					Initial	Final	1 dy.	7 dys.	28 dys.	3 mos.	1 yr.	1 dy.	7 dys.	28 dys.	3 mos	1 yr.
1903	20	O.K.	3.135	2.1	162	345	307	701	783	827	*	74	214	299	367	*
1904	44	O.K.	3.150	2.0	132	342	300	744	848	914	938	86	262	354	401	427

* Tests for 1 year were not completed when records closed. 1905 report not yet issued.

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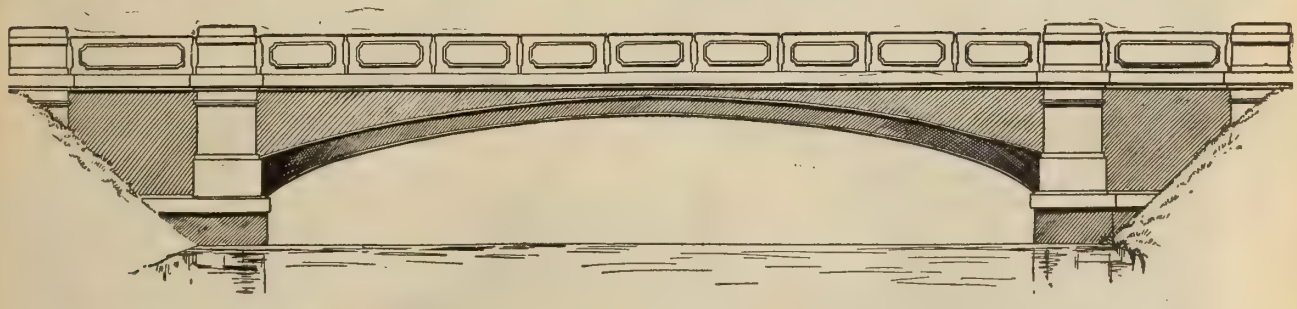

This cut shows ONE of SEVEN arch bridge spans which we are now completing at Ottawa, Ont. All parts including arches and railings are in concrete thoroughly reinforced with steel bars imbedded in same. This construction is very rigid under heaviest loads, and will resist any flood or ice flow. No painting or maintenance; they are there to stay as long as the native rock. Cost about same as for steel bridges, and superior beyond comparison. Plans and tenders promptly submitted.

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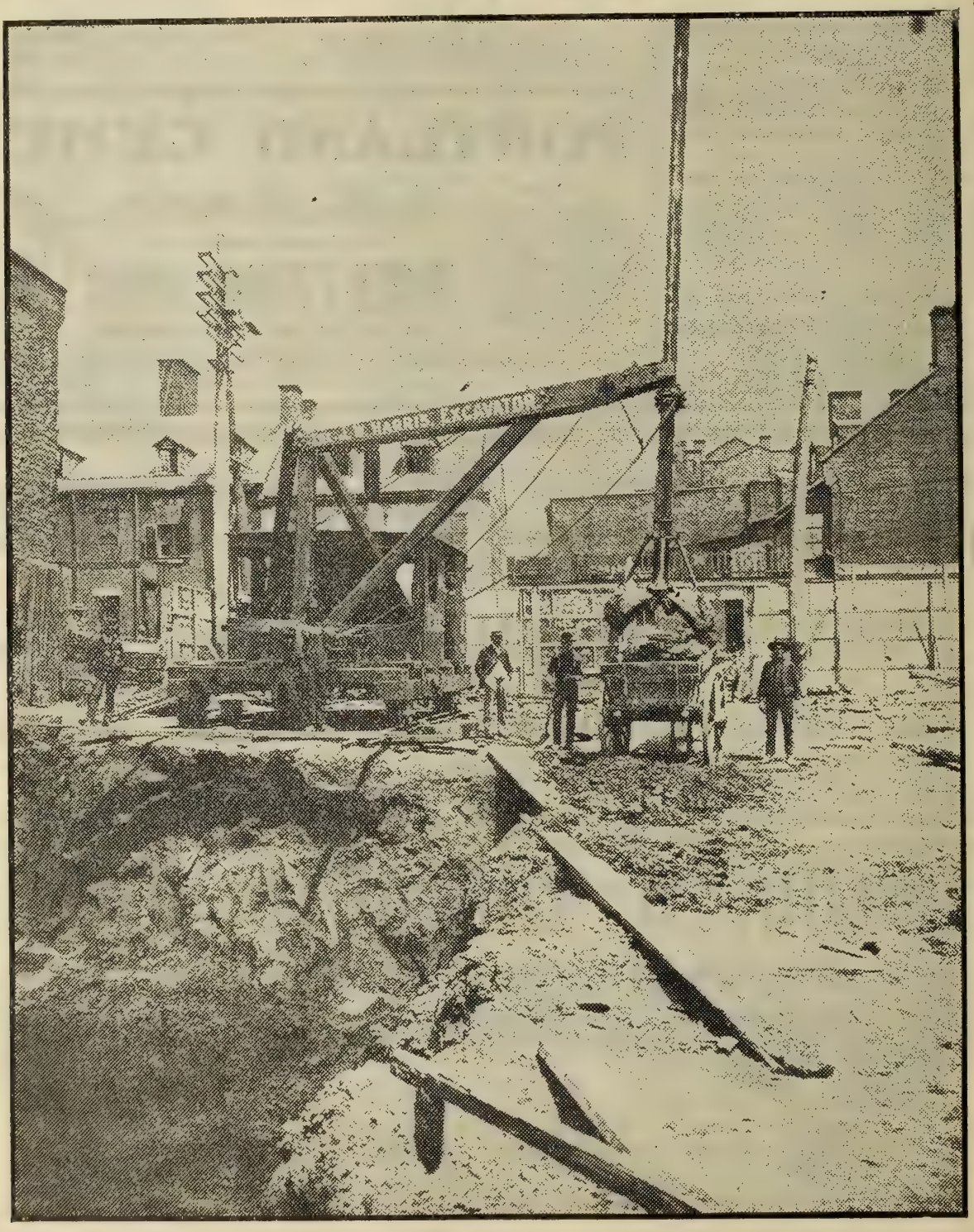

The merits of this machine have been investigated by the Engineering Department of the Canadian Pacific Railway Company and as a result of the investigation, the Company have closed a contract with the J. W. Harris Company for the use of a machine on their Lachine Canal Branch.

This machine will save any Contractor from one hundred to two hundred per cent. over and above hand labor for any kind of work on which it may be placed.

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SOLE AGENTS FOR CANADA.

BUSINESS NOTES.

The contracting firm of Barette & Godbout, of Quebec, have registered their business.

Alexis Chopin and Arthur Aubuchon, contractors, Montreal, have had their business registered under the name of Chopin & Aubuchon.

J. U. Bordua & Co. is the name under which Mrs. J. U. Bordua and E. L. Rivard, manufacturers of cement bricks, etc., St. Paul, Que., have registered their business.

The Canadian White Company, Limited, of Montreal, have opened a western office in the Bank of British North America, Winnipeg, from which western building operations will be handled, also railroad work, of which they have on hand the construction of about 140 miles of G.T.P.R., from Touchwood Hills to Saskatoon.

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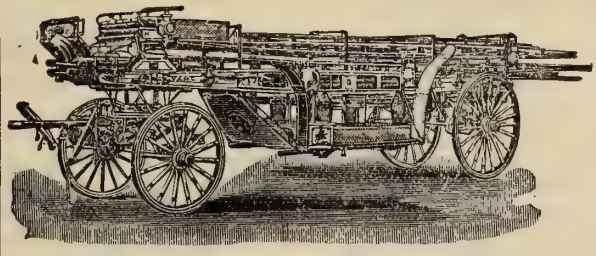

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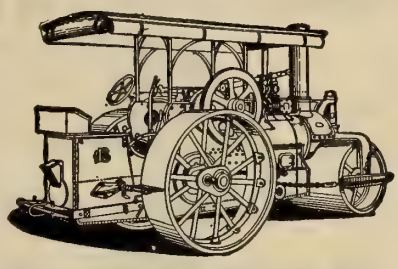

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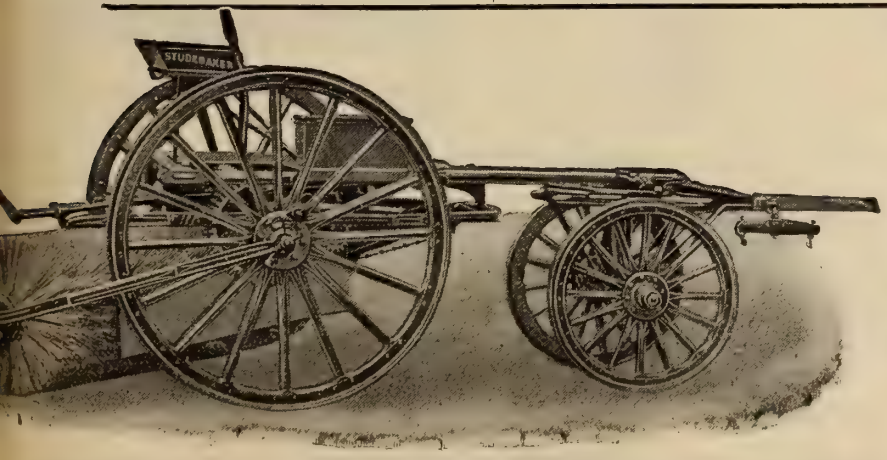

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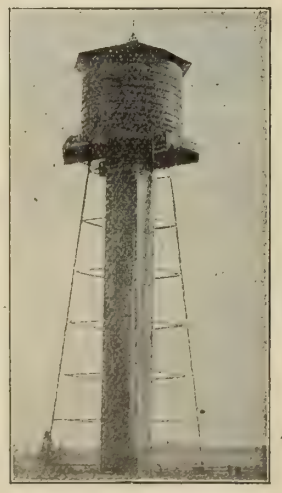

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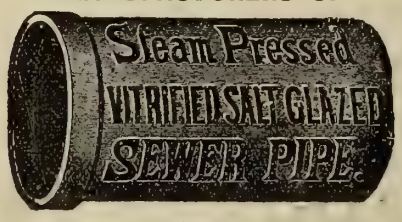

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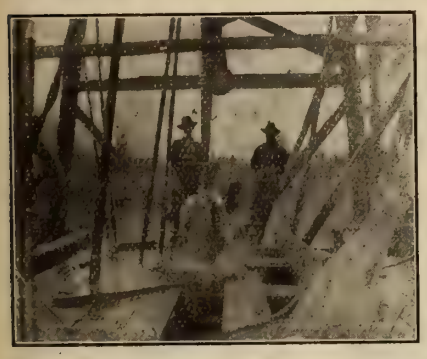

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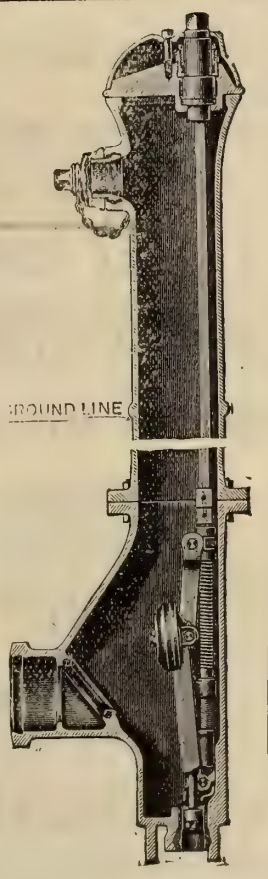

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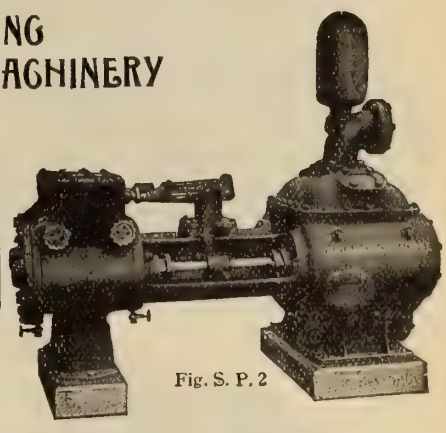

Fig. S. P. 2

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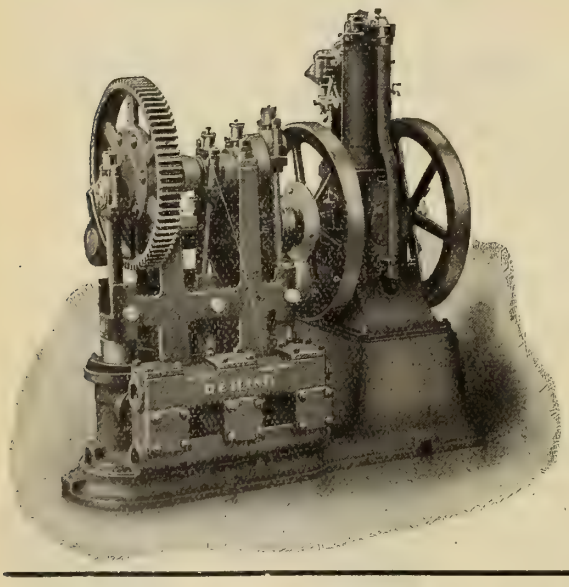

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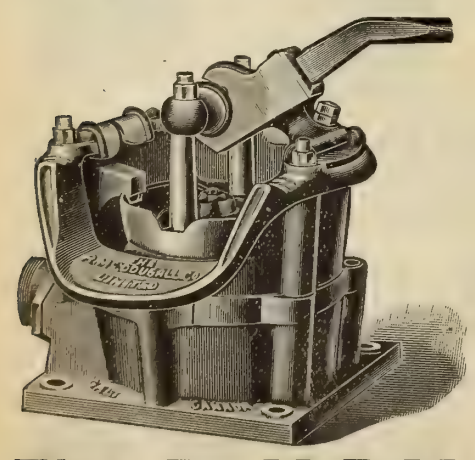

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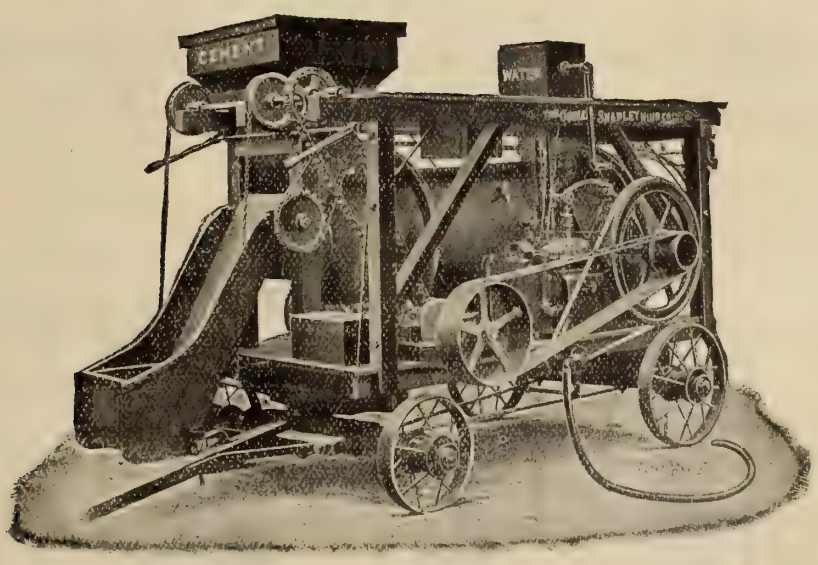

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VOL. 17. TORONTO, MONTREAL — JULY 25, 1906 — WINNIPEG, VANCOUVER No. 21

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Examination for Admission as Associate.

An examination for admission as Associate of the Royal Institute of British Architects, London, will be held in Toronto, from the 16TH to 23RD of NOVEMBER, 1906.

Full particulars and all information regarding this examination can be had by applying to F. S. BAKER, Honorary Secretary for Canada Mail Building, Toronto.

THE PROVINCE OF SASKATCHEWAN

DEPARTMENT OF PUBLIC WORKS

TENDERS FOR THE SUBSTRUCTURE

Of Traffic Bridge at Battleford

Sealed tenders addressed to "The Deputy Commissioner of Public Works, Regina, Sask." and endorsed "Tenders for Battleford Bridge" will be received up to 4.30 p m., MONDAY, AUGUST 13TH, 1906, for the supply of all material and the construction of eight (8) concrete piers and two (2) abutments for a traffic bridge over the Saskatchewan River at Battleford.

About 5 000 cubic yards of concrete will be required in the work.

A certified cheque for the sum of $4,000 must accompany each tender. The cheque will be retained until the necessary contract and bond are executed and the work commenced.

The cheques of unsuccessful bidders will be returned after the contract is signed.

The right is reserved to reject any or all bids or waive any defects.

Plans, specifications and all information may be obtained on application to the undersigned.

Dated at Regina, Sask., June 29, 1906.

F. J. ROBINSON,
Deputy Commissioner of Public Works

POSITION WANTED

Situation wanted by experienced architectural or builders' superintendent. Recommendations supplied. Bo 84, CONTRACT RECORD.

CITY OF SASKATOON

Province of Saskatchewan

TENDERS FOR

WATERWORKS, SEWERAGE AND ELECTRIC EQUIPMENT

Tenders will be received by the Secretary-Treasurer of the City of Saskatoon, Sask, until 8 p. m. on

TUESDAY, AUGUST 14TH, 1906

for the following works:

Contract "A"—Labor pipelaying on waterworks and sewers.
Contract "B"—Power house and chimney.
Contract "C"—Water tower and foundation.
Contract "D 1"—Cast-iron pipes and specials.
Contract "D 2"—Wooden stave pipe.
Contract "E"—Fire hydrants, valves, etc.
Contract "F"—Sewer pipes and junctions.
Contract "G"—Pumping machinery.
Contract "H"—Boilers.
Contract "J"—Electric light engine.
Contract "K"—Electric lighting equipment.

Plans and specifications may be seen at the office of the Chief Engineer, 103 Bay street, Toronto, Ont., or at the office of the Secretary-Treasurer, Saskatoon, Sask. No tender necessarily accepted.

JAS. CLINKSKILL, ESQ., Mayor, Saskatoon, Sask; ADAM TURNER, ESQ., Secretary-Treasurer, Saskatoon Sask.; WILLIS CHIPMAN, C. E., Chief Engineer, 103 Bay street, Toronto, Ont.

DEBENTURES FOR SALE

TOWNSHIP OF DERBY - COUNTY OF GREY

Sealed lump tenders will be received by the undersigned up to 3RD AUGUST, 1906, at 6 o'clock p. m., for the purchase of Drainage Debentures of the following description: Twenty of $156.33 each, including both principal and interest, payable at the Traders Bank in the Town of Owen Sound on the 10th day of December in each year, the first to fall due on the 10th day of December, 1907, and the last on the 10th day of December, 1926. The Debentures will be deposited in the said Bank and delivered on the receipt of the purchase price in a lump sum on or before the 31st day of August, 1906.

For further particulars apply to the Township Solicitors, Messrs. MacKay, Sampson & Telford, Box 390, Owen Sound, or to

WILLIAM BEATON, Tp. Clerk.
Township of Derby, Box 39, Kilsyth, Ont.

FOR SALE CHEAP

About 75,000 ft. Best quality Scotch Sewer Pipe. Sizes 5" to 18" diameter, ex S/S "HESTIA" on wharf Halifax, N. S. and St. John, N. B. For particulars apply to

HYDE & WEBSTER,
Montreal, Que.

TO CONTRACTORS

Tenders, separate or bulk, will be received by the undersigned up to noon of JULY 30TH, for the several trades works required in the rebuilding of Christ Church, Tyendinaga Indian Reserve, near Deseronto, for the Interior Department, Ottawa.

Plans and specifications may be seen on and after the 20th inst. at the offices of the undersigned, Belleville, the Rectory, Deseronto, and Power & Son, architects, Merchant's Bank Chambers, Kingston.

The lowest or any tender not necessarily accepted.

WM. R. AYLESWORTH, ESQ., Indian Agent, County Buildings, Belleville, Ont.

CITY OF REGINA

FIRE HALL

Sealed tenders marked "Tender for New Fire Hall" will be received by the undersigned up till WEDNESDAY, 1ST AUGUST, 1906, at 5 o'clock p.m. for the erection of a New Fire Hall for the city of Regina, according to plans and specifications which may be seen either at the office of the City Engineer, Regina, or the office of the Architects, Messrs. A. and W. Melville, Union Bank Building, Winnipeg.

A deposit of 5 per cent must accompany each tender.

The lowest or any tender not necessarily accepted.

J. KELSO HUNTER,
City Clerk.

Regina, 18th July, 1906.

$34,000.00

TOWN OF CARMAN

Debentures for Sale

Sealed tenders addressed to the Secretary-Treasurer of the Town of Carman and marked "Tender for Waterworks and Sewer Debentures" will be received up to 8 o'clock p.m. on SATURDAY, THE 25TH DAY OF AUGUST, 1906, for the purchase of Debentures of the Town of Carman amounting to Thirty-Four Thousand Dollars ($34,000.00) with payments distributed over a period of twenty years from the Thirtieth Day of June, A.D., 1906, with interest at the rate of five (5) per cent. per annum

Principal and interest payable at the Canadian Bank of Commerce Carman, and the debentures such that the total amount of principal and interest will be as nearly equal as may be in each year.

The highest or any tender not necessarily accepted.

Any information desired may be obtained by addressing the Secretary-Treasurer.

A. MALCOLMSON,
Secretary-Treasurer of the Town of Carman

Dated at Carman, Man., July 18th, 19 6

[FOR ADDITIONAL ADVERTISEMENTS FOR TENDERS SEE NEXT PAGE.]

DRAUGHTSMAN WANTED.

One with experience on stone work preferred. Write stating experience, salary required, etc.

ROMAN STONE COMPANY,
TORONTO, CAN.

WANTED

Competent Architectural Draughtsman
WICKSON & GREGG,
59 Yonge Street, Toronto.

Town of Sault Ste. Marie, Ont.

Sealed Tenders will be received by the Town Clerk until 8 p.m. on

MONDAY, AUGUST 6th, 1906

for the construction of Section 'K' of the Town Sewerage System The work contemplated is the supplying of the necessary labor and materials for the construction of about 15,000 lineal feet of 8" and 10" Tile Sewers.

Plans, specifications and all information may be obtained at the Town Hall on and after Monday, July 30th, 1906.

C. J. PIM, Town Clerk.

J. H. GIMBY, Mayor. W. F. GRANT, C.E., Town Engineer.

$24,000.00
TOWN OF CARMAN
Debentures for Sale

Sealed tenders addressed to the Secretary-Treasurer of the Town of Carman and marked "Tender for Electric Light and Power Debentures" will be received up to 8 o'clock p.m. on SATURDAY, THE 25TH DAY OF AUGUST, 1906, for the purchase of Debentures of the Town of Carman amounting to Twenty-Four Thousand Dollars [$24,000.00] with payments distributed over a period of Thirty Years from the Thirtieth Day of June, A. D., 1906, with interest at the rate of five [5] per centum per annum.

Principal and interest payable at the Canadian Bank of Commerce at Carman, and the debentures such that the total amount of principal and interest will be as nearly equal as may be in each year.

The highest or any tender not necessarily accepted.

Any information desired may be obtained by addressing the Secretary-Treasurer.

A. MALCOLMSON,
Secretary-Treasurer of the Town.

Dated at Carman, Man., July 18th, 1906.

TENDERS FOR
PLUMBING WORK, ETC.

Tenders addressed to the undersigned will be received, through registered post only, up to 12 o'clock noon on

Tuesday, August 7th, 1906

for the removal of the present lavatory fixtures and fittings, and the complete supply and installation of two closets, one urinal and one wash-basin, gas fitting, etc., in Police Station No. 6, Toronto.

Copy of specifications and tender form, together with all information relative thereto, may be obtained at the office of the Property Department, City Hall, Toronto.

The usual conditions pertaining to tendering, as prescribed by city by-law, must be strictly complied with, and envelopes containing tenders must be plainly marked on outside as to contents.

The lowest or any tender not necessarily accepted.

EMERSON COATSWORTH (Mayor),
Chairman Board of Control.

City Hall, Toronto, July 20th, 1906.

Dahoney & Donovan, railway contractors, Reids Station, Quebec, is the name under which Michael Dahoney and John Donovan have registered their business.

CONTRACTS OPEN.

LEFROY, ONT.—F. Whan is preparing to erect a new residence here.

HANLEY, SASK. — New buildings for the Exhibition are to be erected here.

ST. JOHN, N.B.—The erection of a new City Hall building is being considered.

LETHBRIDGE, ALTA. — A new woollen mill is to be established here, cost $45,000.

OAK POINT, N. B.—A new wharf is to be built here by the Dominion Government.

RED DEER, ALTA. — A site has been purchased for the new opera house to be built here.

ELM CREEK, MAN.—T. Wood has taken tenders for erection of a school house and shed.

EDMONTON, ALTA.—A new club house is to be erected on the site of the present building.

HUMBOLDT, SASK. — The Canadian Bank of Commerce will build a new office building here.

GRAYSON, SASK. — The Roman Catholic congregation are preparing to erect a new church.

HIGH RIVER, ALTA.—The Presbyterian congregation intend erecting a church to cost $10,000.

FRANK, ALTA.—Buildings are soon to be erected for a cement plant which is being established here.

PETERBORO, ONT. — The Peterboro Steel Rolling Mills, are considering establishing a plant here.

WELLAND, ONT. — J. F. Mills, Buffalo, is considering the establishment of an automobile factory here.

SUMMERLAND, B.C.—A free site has been granted for the new Baptist College to be established here.

HAMIOTA, MAN.—W. J. Stevens has taken tenders for construction of a pile bridge over the Oak river.

WYOMING, ONT.—The Methodist congregation are taking steps towards the erection of a new parsonage.

SWIFT CURRENT, SASK.—W.W. LaChance, architect, is preparing plans for school building, cost $10,000.

MILLSIDE, B. C. — Tenders have been taken by the Fraser River Saw Mills for erection of six cottages.

BUCKINGHAM, QUE.—A by-law authorizing a bonus of $25,000 to a boot and shoe factory has been carried.

STEPHENFIELD, MAN.—E. Watson, architect, Carman, has prepared plans for a new school house here.

BRADFORD, ONT.—G. W. Stoddart has taken tenders for construction of cement sidewalk on Holland street.

LACOMBE, ALTA. — Eade Bros., architects, Winnipeg, have prepared plans for a new school building here.

PIERSON, MAN. — The Northern Bank are considering the erection of a building for bank and other purposes.

PORT CREDIT, ONT.—Permanent offices are to be erected here in connection with the brick works, cost $8,000.

FREDERICTON, N. B.—$40,000 4 per cent. sewerage debentures are offered for sale by I. R. Golding, City Treasurer.

MATHER, MAN.—D. B. McKinnon will receive tenders up to August 1st for building a two-story brick school-house.

MARQUETTE, MAN. — A by-law will be voted on August 11th to raise $2,000 for new school in Rosser municipality.

ELORA, ONT.—W. A. Petrie, Village Clerk, will receive tenders up to August 6th for purchase of $3500 village debentures.

TORONTO JUNCTION, ONT. — The Cudahy Packing Co., of Chicago, intend opening a branch of their business here.

VICTORIA, B.C.—It is announced that a large saw mill is to be erected at Moresby island. J. Moore of Seattle is interested.

WOLFE ISLAND, ONT.—It is stated that Father Spratt is considering the erection of a new church here to cost $40,000.

LEAMINGTON, ONT.—T. Dresser, jun., will receive tenders up to July 26th for construction of a cement bridge on Talbot road.

WEYBURN, SASK.—It is said that arrangements have been made for a large foundry and machine shop to be erected here.

MOOSE JAW, SASK. — Jones & Bunyard, architects, have taken tenders for erection of a brick building for Kern & MacLeod.

WOODSTOCK, ONT.—B. McNichol will receive tenders up to July 27th for additions and alterations to Collegiate Institute building.

CARLETON PLACE, ONT.—The Council gives notice of its intention to construct concrete sidewalks on Flora and William streets.

STRATFORD, ONT. — A site has been selected in Queen's park for the new Normal school and has been approved by the Government.

WHEATLEY, ONT.—J. W. Kennedy will receive tenders up to July 28th for erection of a new I.O.O.F. block, corner Erie and Elm streets.

ALMONTE, ONT.—Tenders will be received by the Rosamond Woolen Co., up to August 6th for erection of stone weaving shed 207½ x 75 feet.

STRASSBURG, SASK.—The Union Bank of Canada has purchased a site opposite the Strassburg hotel and purposes erecting a two-storey building.

NORWICH, ONT.—The by-law has been carried to guarantee a loan of $5,000 to the West-Taylor Bickle Co. for their broom and woodenware factory.

SALISBURY, ONT.—Geo. McKay, Reeve, will receive tenders up to August 1st for erection of a steel bridge with cement abutments over the creek at Vesta.

ROSTHERN, SASK. — The Rosthern Gas & Light Co. have applied for incorporation. The building for their gas plant is to be erected on Saskatchewan street.

TRURO, N.S.—H. MacKenzie will receive tenders up to August 14th for erection of a Home for the Poor. Plans with above named and with D. Henderson, architect.

GANANOQUE, ONT. — W. McCawley, Paoli, Pa., has purchased Robbin's Point on Grindstone island on which he will build a fine summer residence.

CALGARY, ALTA.—The Dominion Meat Co. will erect a three-story brick and stone block 60 x 125 feet on Ninth avenue east, cost $45,000. Hodgson & Bates, architects.

OLDS, ALTA. — The Council have decided to build a new fire hall.—A. S. Corbett intends building a three-story hotel, cost $15,000. Wilson & Lang, architects, Calgary.

FERNIE, B.C.—F. Gelinas, Department of Public Works, Ottawa, will receive tenders up to August 4th for construction of a post office. Plans at the Department and with A. Kerr, Clerk of Works.

CARMAN, MAN.—A. Malcolmson will receive tenders up to August 25th for the purchase of $34,000 5 per cent.

The SMITH CONCRETE MIXER

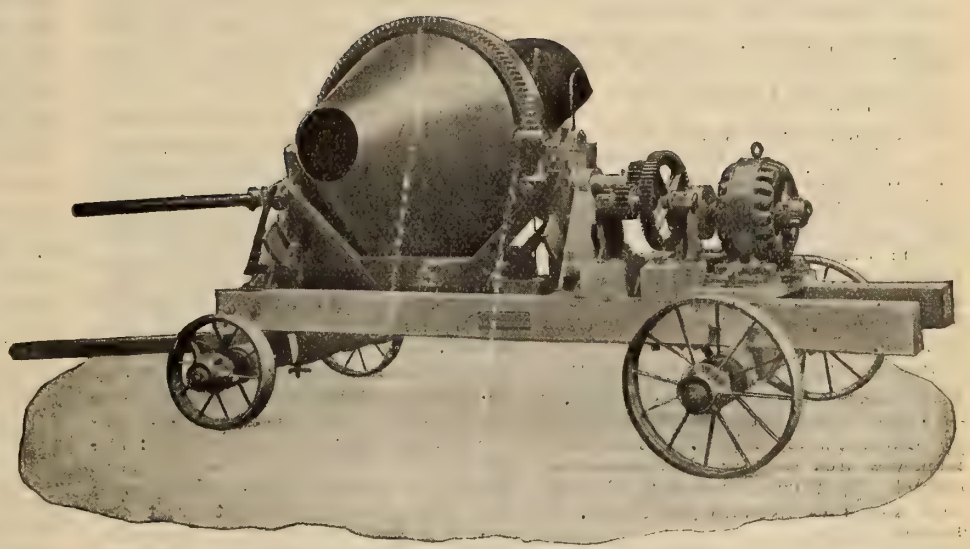
BETTER THAN EVER

MORE POPULAR THAN EVER

SALES GREATER THAN EVER

WHY?

Because we build the machine of the best material, with the best workmanship, with the result that when other machines are broken down and out of business



(Smith Mixer on Truck, Motor Driven.)

THE SMITH is still making and saving money for the Contractor.

W. H. C. MUSSEN & CO.

Railway, Mining and Contractors' Supplies

MONTREAL

waterworks and sewer debentures also for $24,000 electric light and power debentures.

SEAFORTH, ONT. — R. Bell will receive tenders up to August 5th for erection of a brick separator factory, brick erecting shop and addition to office for Robert Bell Engine & Thresher Co.

COLLINGWOOD, ONT. — John Wilson, architect, will receive tenders up to July 28th for construction of two reinforced concrete arched bridges at Pretty River Valley road in Nottawasaga township.

NORTH BAY, ONT. — A site has been purchased at Trout Lake for the new smelter for the Montreal Reduction & Smelter Co., cost $1,000,000.—A German firm is seeking a site for a smelter in this part of the province.

HALIFAX, N.S. — R. J. Wilson, Secretary, has taken tenders for improvements in Public school buildings.—The Secretary will receive tenders up to July 26th for erection of a brick school house for St. Patrick's Girls' High School.

REGINA, SASK. — The Northern Bank have recently secured a site on Scarth street for a new building.—J. K. Hunter, City Clerk, will receive tenders up to August 1st for erection of a new fire hall. Plans with City Engineer and with A. & W. Melville, architects, Winnipeg.

CARON, SASK.—The C.P.R. purpose making additions to their stations here. — The Presbyterian congregation are preparing to erect a new church this summer. — The Anglican congregation have purchased a site for a new church building.

VANCOUVER, B.C.—Parr & Fee, architects, have taken tenders for erection of a four storey hotel on Pender street for Cavanagh & Holden. — Plans have been prepared for new car barns to be erected in Mount Pleasant, between 14th and 15th avenues for the B. C. Electric Railway.

LONDON, ONT. — The Normal school building will be remodelled to accomodate increased attendance. — The following building permits have been issued: C. Hall, brick veneer cottage, Tecumseth avenue; George White & Sons, brick storage building, Cabell street; K. A. Watson, two-story brick dwelling, Wortley road, Dr. E. Williams, brick residence and office, 365 Queens avenue; W. G. Howlett, cement block residence, West High street; Miss Hughes, frame cottage, Chester street; J. Webster, two-story brick veneer residence, Hamilton road.

HAMILTON, ONT. — The C.P.R. have purchased the property, corner King and James streets, on which they purpose erecting a large office building. —Building permits have been issued as follows: Stewart McPhie, architect, brick dwelling for Roy Moodie, Ida street, cost $4,000; John Stuart, brick dwelling, Hannah street, cost $2,500; Charles Mackinson, brick dwelling, Sherman avenue, cost $2,800; brick dwelling, Homewood avenue, cost $2,800; William Fogwell, brick dwelling, Ray street, cost $1,500.—Plans are being prepared for a four story station for the Cataract Power Co.

QUEBEC, QUE. — It is estimated that the new immigration building to be constructed at the Breakwater will cost about $200,000.—It is understood that the Dominion Government have approved of the plans for the enclosed dockage of St. Charles river in addition to building a revetment wall from Point-a-Carcey wharf to Point-a-Piseau.—The following building permits have been issued: D. Rousseau, building on Chenier street; A. Pamondon, repairs to building on Desfosses street, cost $5,000; X. Pare, repairs to building on Taschereau avenue, cost $1,200; O. N. Shink, brick building on Sauvageau street, cost $2,000; G. Hossack, repairs to building, corner Ann and Garden streets.

OTTAWA, ONT. — The Council gives notice of its intention to construct tar macadam pavement on Henderson avenue from Laurier to Osgoode street and on Chapel street from Laurier avenue to Rideau street, also concrete sidewalk on Second avenue from Bank street to O'Connor.—L. K. Jones, Department of Railways and Canals, will receive tenders up to August 20th for construction of an 80 foot steam tug for the Rideau Canal.—E. F. Gordeau, Deputy Minister Marine and Fisheries, will receive tenders up to August 1st for construction of galvanized steel towers for light houses for the Department of Marine and Fisheries.—P. E. Ryan, Secretary, Commissioners of Transcontinental Railway, will receive tenders up to August 14th for construction of bridges at River Aux Pommes, River Jacques Cartier, Crossing C.P.R., Rivers St. Anne, Noir, Portneuf, Charest and Batiscan. Plans with Chief Engineer, Ottawa, and District Engineer, Quebec.

MONTREAL, QUE.—L. O. David, City Clerk, will receive tenders up to July 27th for steel work for the new No. 5 fire station Berthelet street. Plans with A. F. Dunlop, architect, 72 Temple building.—It is expected that the G.T.R. will erect a large hotel near Bonaventure station.—It has been announced that a new music hall will be erected here for which money has been donated by a citizen.—The directors of Welcome Hall mission have bought three dwellings on St. Antoine street which they will have remodelled for their use.—Building permits have been issued as follows: Dominion Oil Cloth Co., brick and stone factory, cost $4,000; Wm. Clark, brick and wood factory, Amherst street, cost $4,000; Montreal Street Railway Co., brick and wood sheds, St. Raymond street, $6,000; M. A. Weir, two brick and stone dwellings, Sherbrooke street, cost $25,000; Whittall, brick and wood factory, Mullins street, cost $10,000; J. B. Desrochers, two brick and wood dwellings, Gain street, cost $6,000; American Tobacco Co., brick and stone factory, St. Antoine street, cost $15,000; Villineure Estate, two brick and stone dwellings and stores, St. Lawrence street, $10,000; M. B. Davis, brick and stone dwelling, Pine street, cost $75,000.

WINNIPEG, MAN. — The Sherwin William Paint Co., intend beginning the erection of a four story warehouse at an early date.—The Bell Telephone Co., intend building a new exchange, corner John street and Croydon avenue, Fort Rouge, this season. — The Western Foundry Co. have purchased a site west of McPhillips street, near C.P.R. shops for a foundry building.—Tenders have been taken for reconstructing the Congregation Rosh Mina, corner Martha and Henry streets.— The Civic Power Committee have recommended Pointe du Bois as the site for the development of power.—The City Engineer has been recommended to survey a right of way from Lac du Bonnet to Pointe du Bois for an electric tramway. — D. Smith, architect, has taken tenders for erection of a hotel, corner Main and Henry streets. —The Western Canada Flour Mills Company have purchased a site on Lombard street for an office and warehouse. —The Fire, Water & Light Committee will receive tenders up to August 27th for supply of two turbine pumps and electric motors for the City waterworks. The Committee will receive tenders up to July 30th for furnishing and erection of two steel caissons each about 15 feet in diameter by 43 feet in depth also for erection of fire service waterworks pumping station on James avenue east. Plans with H. N. Ruttan, City Engineer.

TORONTO, ONT.—A. G. Strathy & Co., real estate brokers, have sold the property, corner Simcoe and Richmond streets to Lovell & Co., stationers, which will be remodelled.—T. E. Washington, real estate dealer, sold a lot on Euclid avenue to T. Butler on which a pair of eight roomed brick residences will be built.—A. J. Rattray has taken tenders for erection of a house on Dundonald avenue for F. McMahon.—The Parks and Exhibition Committee intend having the conservatories in Allan Gardens extended ot a cost of $2,000, also to have an open pavilion erected.—City Engineer Rust has engaged C. E. Strachan to make a report on sewage system in Toronto.—Tenders have been called at No. 12 Emerson avenue for work on the erection of two houses.—A roller rink is to be erected near the corner of Broadview avenue and Queen street.—Plans are being prepared for a new church for the Metropolitan Tabernacle on Markham street, cost $15,000.—The factory premises and site of the Henderson Roller Bearing Co., on King street west, have been sold to Gowans, Kent & Co. who intend having the factory completed. —The A. R. Williams Co. are looking for a site on which to erect a new warehouse.—It is again reported that Siegel, Cooper & Co. are seeking a site for a large departmental store.—Tenders are called for work on two houses. Plans with J. D. Farquhar, 12 King street east. —It is expected that a new Collegiate Institute will be erected on the University grounds. — Building permits have been issued as follows: St. Simon's Parish, 2 story brick parish house, Howard street, near Glen road, cost $18,500; A. H. Irving, 2 story and attic frame dwelling, Hambley avenue, cost $2,100; T. Farr, 2 story and attic brick dwelling, Broadview avenue, near Queen street, cost $2,000; R. C. Vaughan, pair 2½ story brick dwellings, Kendall avenue, cost $6,000; D. M. McConkey, pair 2 story brick dwellings, Beatrice street, cost $4,200; Dominion Bank, 2 story brick and stone bank, corner Queen street and Broadview avenue, cost $16,500; Dr. L. F. Miller, 2 story and attic brick dwelling, Dale avenue, cost $7,000; Geo. Kappele, 2½ story brick dwelling, Park road, cost $6,500; Thos. Cherry, pair 2 story brick and stone dwellings, 198-200 Margueretta street, cost $4,000; F. D. Bowerman, 2 story brick dwelling, St. Helens ave., cost $4,600; C. Mould & Co., 2 story brick dwelling, Dundonald avenue, cost $3,000; W. W. Hiltz, pair 2 story brick dwellings, 1-3 Bain avenue, cost $5,000; E. Elliott, pair 2 story brick dwellings, Palmerston avenue, cost $4,000; D. J. Sweeney, 2 story brick dwelling, 376 Queen street east, cost $2,000; L. C. Sheppard, 2½ story brick dwelling, South Drive, cost $4,200; Deeth & Sons, 2½ story stone and brick dwelling, 118 Deleware avenue, cost $3,000; R. G. Graydon, 2 story and attic brick dwelling, corner Lowther and Madison avenues, cost $4,500; W. H. Wriggett, 2 story brick and stone dwelling, 126 Bartlett ave., cost $2,800; University of Toronto, erecting seats in Convocation Hall, near College street, in Queen's Park, cost $9,000; E. J. Farnworth, 2 story brick store and dwelling, College street, near Gladstone ave., cost $4,000; Bank British North America, 2 story and basement, brick and stone bank, King and Dufferin streets, cost $12,000; Thos. Sproule, three 2 story and basement brick and R. C. dwellings, Broadview ave., near Elliott street, cost $5,600; Geo. Worrell, 2 story and attic brick dwelling, 61 Hogarth avenue, cost $3,000; Mrs. C. M. Dancy, 2 story and attic brick dwelling,

Palmerston Boulevard, cost $5,000; Jas. Caldwell, pair 2 story and attic brick dwellings 495 Givens street, cost $5,000; A. Martin, three 2 story and attic brick and stone dwellings, King street, near Gwynne ave., cost $9,000; N. H. McBrady, 2 story and attic brick dwelling, 105 Galley ave., cost $3,200; Geo. Irwin, 2 story and attic brick dwelling, Albany ave., cost $3,000; Hector Ridout, 2 story brick and stone dwelling, Sinclair ave., $4,000; J. W. Walker, six 2 story and attic brick dwellings, Beatrice street, cost $18,000; W. Butler, 2 story and attic brick and stone dwellings, Grace street, cost $3,000; J. S. Van Camp, 2 story and attic brick veneer dwelling, West ave., cost $1,600; J. Bishop, 2 story and attic brick and stone dwelling, Palmerston bolevard, cost $5,000; Stewart & Cameron, pair 2 story brick and stone dwellings, Roncesvalles ave., cost $4,600; Geo. Barron, 2 story and attic brick dwelling, Charles street, cost $5,000; Cyclone Fence Co., 2 story frame and galvanized iron storage shed, Soho ave., $5,000; J. M. Rutherford, 2½ story brick and stone dwelling, Havelock street, cost $5,000; Robt. Corbett, pair 2½ story brick dwellings, Concord ave., cost $5,400; Wm. Helson, 2½ story brick and stone dwelling, Palmerston boulevard, cost $5,000.

FIRES.

W. C. Harrison block, Windsor hotel, warehouse of Hunter Bros. and other buildings, Rossland, B.C., loss $30,000. —Saw mill of Goderich Lumber Co., loss $15,000.—Mills of the Cornwall & York Cotton Mills Co., St. John, N.B.—Grist mill and evaporator at Colborne, Ont., totally destroyed.—Grain and feed store of R. A. Bartlett, Sherbrooke, Que., loss $10,000. — Piano factory of Lepage & Fils, Ste. Therese, Que., loss $10,000.—Flour mill of John Lees, Arcola, Sask., loss $20,000.—Saw mill of T. Paradis, Globe Hotel and other buildings at Levis, Que., loss about $40,000.—

CONTRACTS AWARDED.

VEGREVILLE, ALTA.—$1,000 village debentures: J. W. Nay, Regina, purchaser.

CLARESHOLM, ALTA.—$5,000 town debentures: J. W. Nay, Regina, purchaser.

ORILLIA, ONT.—Construction of sidewalks: Maple Leaf Paving Co., successful tenderers.

INNISFAIL, ALTA. — $19,000 town debentures: Canadian Securities Co., Toronto, purchasers.

GRENFELL, SASK.—Erection of new Methodist church; Haw & Talmay, contractors, cost $10,000.

HAMILTON, ONT.—Construction of new drill hall: George F. Webb, contractor, cost $220,000.

IBERVILLE, QUE.—Erection of new public building: A. G. Marshall, Ottawa, contractor, cost $8,000.

STRATHCONA, ALTA.—$1,400 East Edmonton school debentures: J. W. Nay, Regina, purchaser.

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METALLIC ROOFING Co
LIMITED.
TORONTO, CANADA.
IRON

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Drying Apparatus
Mechanical Draft
Exhaust Systems
Pumping Machinery
CANADIAN BUFFALO FORGE CO.
MONTREAL, QUE.

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CONSULTING ENGINEER and EXPERT
SPECIALTIES:
WATERWORKS, SEWERAGE AND ELECTRIC LIGHT
Chief Assistant Engineers:
O. W. SMITH, C. E. W. J. BOWERS, C. E.
23 Jordan Street TORONTO

JOHN S. FIELDING
Mem. Soc. C. E. West Penn. '87.
CONSULTING ENGINEER
Water Powers Dams, Bridges
Room 2, 15 Toronto Street, TORONTO, ONT.

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MEDICINE HAT, ALTA.—Construction of granolithic sidewalk: T. H. Navin, Moose Jaw, contractors.

SASKATOON, SASK. — Erection of new traffic bridge: Gunn & Sons, Winnipeg, successful tenderers.

NORTH BAY, ONT. — Erection of new public building: McGillivray & Labelle, contractors, cost $35,000.

STAYNER, ONT. — Residence for W. A. Doner: Mason'work, Mr. Vickery; carpenter work, W. McMurray.

INVERNESS, N.S.—Erection of new public building: E. F. Munro, New Glasgow, contractor, cost $15,000.

WINDSOR, ONT. — Construction of Michigan Central Railway tunnel under Detroit river: M. J. Haney, Toronto, contractor.

WELLAND, ONT. — Residence on East Main street for W. E. Hardison: Mr. Peacock, contractor. T. L. Nichols, architect.

PEMBROKE, ONT. — Erection of jailer's residence: Kehoe Bros., contractors for everything except heating and plumbing.

BRANDON, MAN. — Erection of a block on Rosser avenue for J. E. Smith: McDongall & Ireland, contractors, cost about $50,000.

REDVERS, SASK.—Erection of Presbyterian church: Masonry, R. Chambers; carpentry, T. K. Downs, of the Souris Construction Co.

PORT ELGIN, ONT.—Warming and ventilating system for High school building: James Smart Manufacturing Co., Brockville, contractors.

GUELPH, ONT.—Extension and improvement of chemical department of Agricultural college: S. F. Whitton, Brantford, successful tenderer at $10,700.

EDMONTON, ALTA.—Residence on Filth street for R. Seacord: May & Sharpe Construction Co., contractors, cost about $24,000. D. Johnson, architect.

GARMAN, MAN.—Boring test wells for waterworks: P. Fleming, Winnipeg, contractor.—Supply of labor and materials for sewage and waterworks: Wallar & McKenzie, successful tenderers.

PORTAGE LA PRAIRIE, MAN.—Improvements and repairs to school building Plumbing work, Johnston & McClymont, $1,679; alterations and repairs, James Spence, $3.020; mason work, W. Ritchie, $665; painting etc., B. Pierce, $884.

CALGARY. ALTA.—New wing to the Holy Cross hospital: T. McCaffrey, contractor, cost about $3 ,000.—Excavation for new warehouse for W. R. Brock Co., Toronto, corner Stephen avenue and Second street: Alberta Building Co., contractors.

ST. THOMAS, ONT. — Erection of Church of Christ building, Railway street: Masonry, A. E. Ponsford; carpentry, Green & Sons; slate roofing, C. Riddle; painting and glazing, E. Dallyn, cost about $12,000. N. R. Darrach, architect.

WINNIPEG, MAN.—Erection of office building corner of Main street and Portage avenue for Osler, Hammond & Nanton: William Grace Co., Chicago, contractors, cost about $150,000.—Erection of building for Northwestern Commercial Travellers' Association: D. D. Wood, contractor, cost $115,000.—New mill for Manitoba Gypsum Co.: Northern Constructions, Limited, contractors.

MONTREAL, QUE. — Office building for the Canadian Express Co. on McGill street: Masonry and brick work, J. H. Hutchison; steel work, Locomotive & Machine Co.; fire proofing, Clinton Fire Proofing Co.; carpentry, Simpson & Peel; cast iron and foundry work, Canada Foundry Co.; roofing, Campbell & Gilday; plumbing and heating, W. J. McGuire & Co.; plastering, J. Morrison & Son; elevators, Otis Fensom Elevator Co.; electric wiring, Collyer & Rock; painting, H. Morgan & Co.; marble work, C. E. Marriott. Hutchison & Wood, architects, cost about $300,000.

OTTAWA, ONT. — Construction of asphalt pavement: Dalhousie street, from Rideau to St. Patrick, $28,460; Laurier avenue, Elgin street to Laurier bridge, cost $4,570; Clarence street, Barrett,s lane to Dalhousie street, cost $7,466. Barber Ashpalt Paving Co., Toronto, contractors. Rate $2.76 per square yard.—Construction of Breboeuf school: Wm. McGillivray, successful tenderer, cost $21,478.—Heating, plumbing and ventilation of St. Peters school: Martel & Langier, contractors at $1,660.—2,500 cars for G. T. P. R.: Rhodes, Currie & Co., Amherst, N. S., contractors.

VANCOUVER, B. C.—Eerection of Mount Pleasant Methodist church, corner Tenth and Ontario streets: George Snider, Victoria, contractor, cost $20,500.—Erection of Isolation Hospital and Nurses' Home: Three isolation buildings of two stories, and nurses' home, Hugh Wilson, $26,473; heating for ieolation buildings, Leek & Co., $3,000; heating nurses' home, Forbes Hardware Co., $350; plumbing of all buildings, Keeks & Son, $2,893; total $32,716.—$525,000 civic debentures and $154,474.92 local improvement debentures: J. F. Helliwell, purchaser.—Erection of Canadian Bank of Commerce building, corner Granville and Hastings streets: Canadian White Co., Montreal, contractors.

TORONTO, ONT. — Construction of Stewart Hartshorn building on River street: Provincial Construction Co., contractors, cost about $30,000. A. J. Rattray, associate architect with Esenwein & Johnson, architects, Buffalo.—Construction of mains for new high pressure system: J. H. McKnight, contractor, cost $94,720.—Laying of sewer on Gerrard street, from Carlow avenue to Logan: J. H. McKnight, cost $1,081.—Laying of sewer on Eastern avenue from Morley to Woodward: J. F. Connonlly, cost $1,252.—Construction of pavements: Asphalt—Bain avenue, 600 feet east of Broadview, $2.198; Hepbourne street, from Ossington avenue to Dovercourt road, $3,683; Barber Asphalt Co., Bitulithic—Gibson avenue, $2,185, City Engineer.

BUSINESS NOTES.

J. Ash & Co., contractors, Montreal, is the name under which Mrs. Joseph Ash has registered.

The Barber Asphalt Paving Company have opened an office in Vancouver, B. C., at 19 Davis Chambers. They have the contract for paving Nelson street from Grenville street to Stanley Park. The company are erecting a $5,000 asphalt manufacturing plant at the foot of Burrard street for this work and for future work. The Vancouver business is in charge of Mr. C. H. McLennan, superintendent and R. C. Sheldon, cashier.

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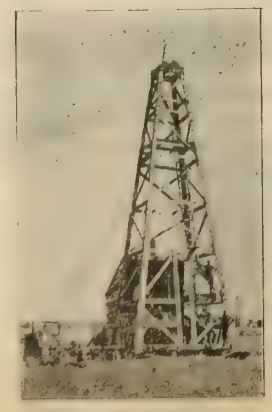

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WOOD PAVING IN ENGLAND.

It is curious that in the process of history repeating itself there should now be exhibited an almost world-wide tendency in municipalities to return to the wood-block pavement, says an exchange. In London and in nearly all of the large towns and cities of the British provinces there has been an enormous increase in the selection of wood paving in preference to all other kinds. This is the more significant for the reason that the wood must be brought from a far-away country, much of it from Australia.

It is put to the proof in experiments extending over periods of from fifteen to twenty-five years that the softer woods creosoted will have a solid life of from twelve to fifteen years, while the harder woods will last from fifteen to eighteen years. It is on record in the parish of St. Pancras, London, where the traffic amounts during the year to 411,318 tons per yard of width, that the wear of the jarah wood of Australia was only about one-fifth of an inch per annum.

This will hardly be said of asphalt, nor yet of the stone block, although it would seem that either of these pavements properly laid would be superior in wearing power to wood. No matter what material may be used, the chief feature contributing to durability is the manner in which it is laid. The best material will soon go to wreck if it be placed upon a rotten concrete foundation. More than a quarter of a century ago in America the wood pavement of creosoted blocks fell into utter disrepute because of the grafting of contractors, or, to put the best face upon it, because the contractors did not know how to lay the blocks.

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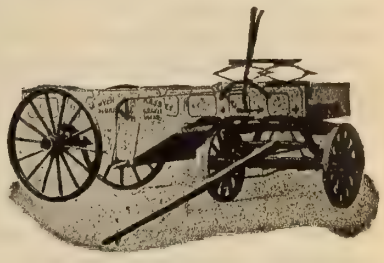

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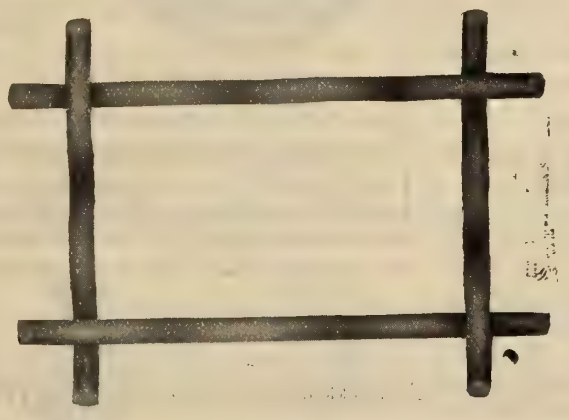

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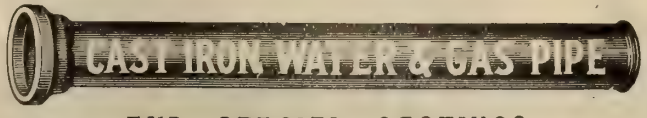

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TOD-INLET CEMENT WORKS.

The cement works at Tod Inlet, B.C., where the Vancouver brand of Portland cement is manufactured, is running at its fullest capacity, which, at the present time, is 600 barrels a day. In order to be in a position to meet the steadily increasing demands put upon the company, of which Mr. R. P. Butchart is the head, another unit has been ordered and is now on the way to the works. When this is installed the capacity will be 900 barrels daily.

From Puget Sound and elsewhere along the Pacific Coast of the United States there are reports constantly circulated that there is a very serious shortage of Portland cement. The fire in San Francisco has had a considerable effect in producing this effect. In consequence of this shortage there has been a sharp advance in the prices on the American side of the line. Mr. Butchart has stated that he had no intention of taking advantage of the temporary shortage in the United States to advance the prices in British Columbia. Moreover, he was going to meet the full demands on the Canadian side before he would ship any of the product of the Tod Creek works to the other side.

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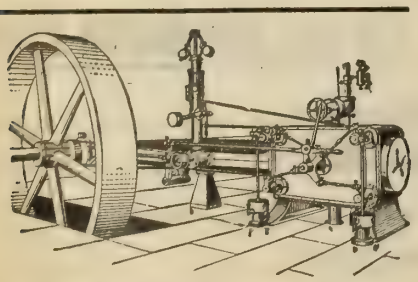

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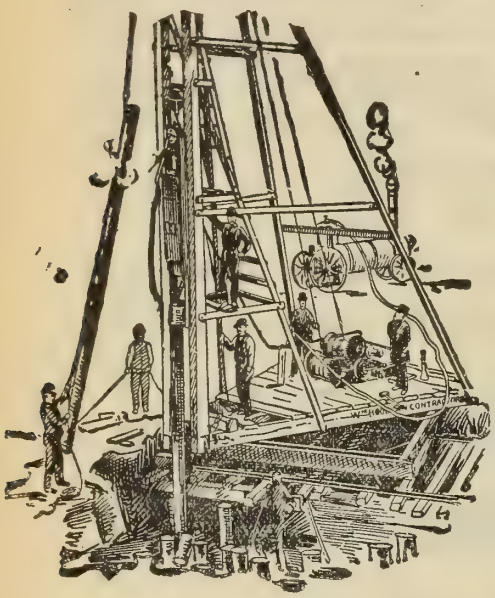

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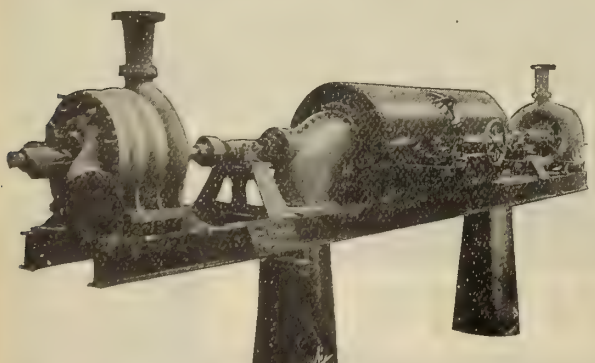

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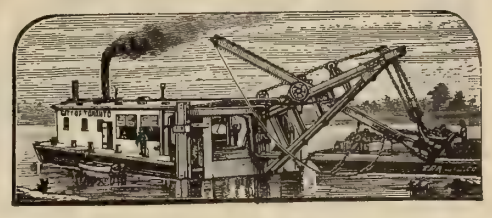

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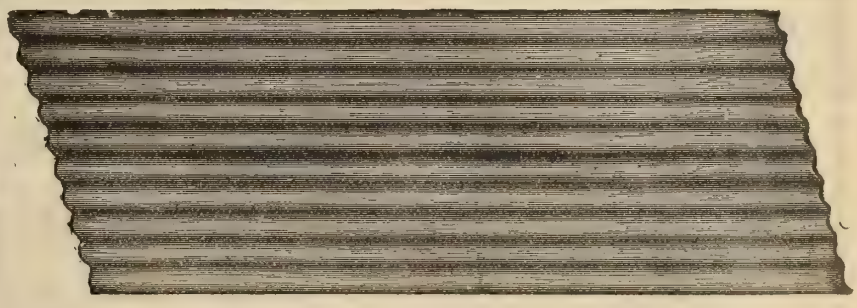

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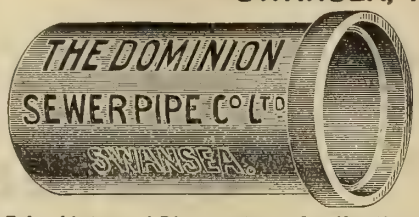

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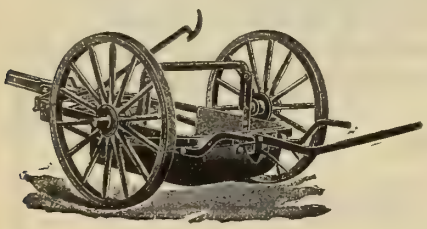

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BY

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							Neat.					3 (Sand) to 1 (Cement)				
					Initial	Final	1 dy.	7 dys.	28 dys.	3 mos	1 yr.	1 dy.	7 dys.	28 dys.	3 mos.	1 yr.
1903	20	O.K.	3.135	2.1	162	345	307	701	783	827	*	74	214	299	367	*
1904	44	O.K.	3.150	2.0	132	342	300	744	848	914	938	86	262	354	401	427

* Tests for 1 year were not completed when records closed. 1905 report not yet issued.

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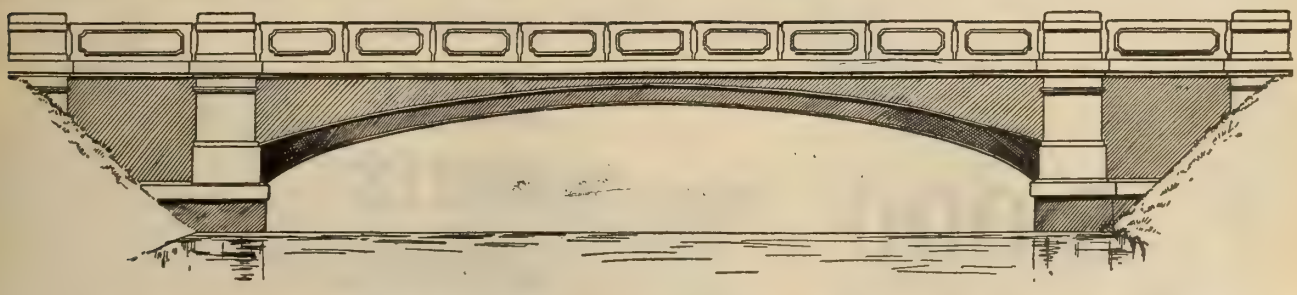

This cut shows ONE of SEVEN arch bridge spans which we are now completing at Ottawa, Ont. All parts including arches and railings are in concrete thoroughly reinforced with steel bars imbedded in same. This construction is very rigid under heaviest loads, and will resist any flood or ice flow. No painting or maintenance; they are there to stay as long as the native rock. Cost about same as for steel bridges, and superior beyond comparison. Plans and tenders promptly submitted.

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Hudson Cobalt Mining Company, Limited, Barrie, Ont., incorporated, capital $300,000. Directors, J. K. Lindsay, A. W. Wilkinson and others.

E. Long Manufacturing Company, Limited, Orillia, Ont., incorporated, capital $75,000. Directors, E. Long, F. Smith, and W. W. McBain.

Canada West Coal & Coke Company, Limited, Winnipeg, incorporated, capital $2,000,000. Promoters, J. S. Hough, A. C. Ferguson and others.

Geo. H. Archibald & Company, Limited, Winnipeg, incorporated, capital $60,000 for the purpose of constructing railways, tramways, docks, etc. Promoters, G. H. Archibald, R. Lawson and others.

Canada Saw Mill Company, Limited, Blind River, Ont., incorporated, capital $100,000. Directors, J. M. Thompson, Menominee, Mich.; C. G. Foster, Milwaukee, Wis.; R. B. Dolsen, Blind River, and others.

PERSONAL.

Mr. L. H. Martyn, contractor, Lorne avenue, East London, Ont., had his hand badly lacerated by being caught in a circular saw, making it necessary to have four fingers amputated.

Concrete caps for piles and sheet piling are so widely used that an inquiry recently received concerning them is somewhat puzzling. The writer asks if it is good practice to embed the heads of such piles, and if so what precaution should be taken to prevent cracks in the concrete. By keeping the piles wet and using thick concrete trouble is usually avoided.

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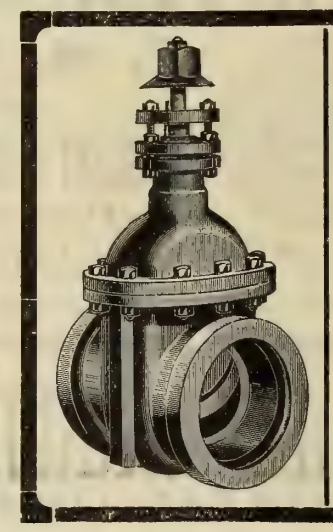

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BUILDING NOTES.

The modern nine-story office building for the Federal Life Assurance Company, Hamilton, Ont., will be a very handsome building. The contractors, the Canadian White Company, expect to have it completed by September 1st. The new Winnipeg Theatre, for the Walker syndicate, will be one of the largest and handsomest theatres in Canada. The Canadian White Company, who have the contract for its construction, are rushing work to have it completed for the opening of the Autumn season. The same firm have in hand the construction of the six-story storage building for the Montreal Terminal Warehouse and Cartage Company, on Grey Nun street, Montreal. It is of steel construction and absolutely fireproof and is expected to be completed by August 1st. The Canadian White Company are also the contractors for the power house for the Montreal Street Railway Company. When completed this building will rank among the most modern on the continent. The new Linton Apartments, corner of Sherbrooke and Simpson streets, Montreal, are also being constructed by this company. This building will be ten stories high and constructed of terra cotta and light brick. It will be completed ready for occupancy by June 1st, 1907.

Legare, Ophir & Cie, contractors, Quebec, have registered their business.

The Pacific Coast Pipe Company, of Vancouver, have recently shipped 10,000 feet of 18 inch wire wound wooden stave pipe to the city of Fort William, the pipe built to stand a regnlar pressure of 130 lbs.

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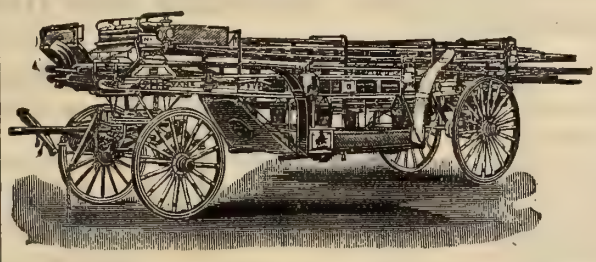

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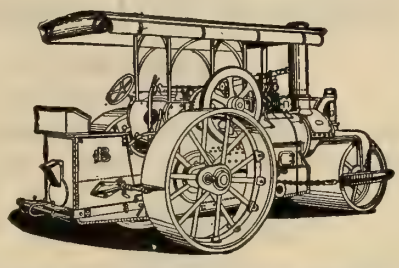

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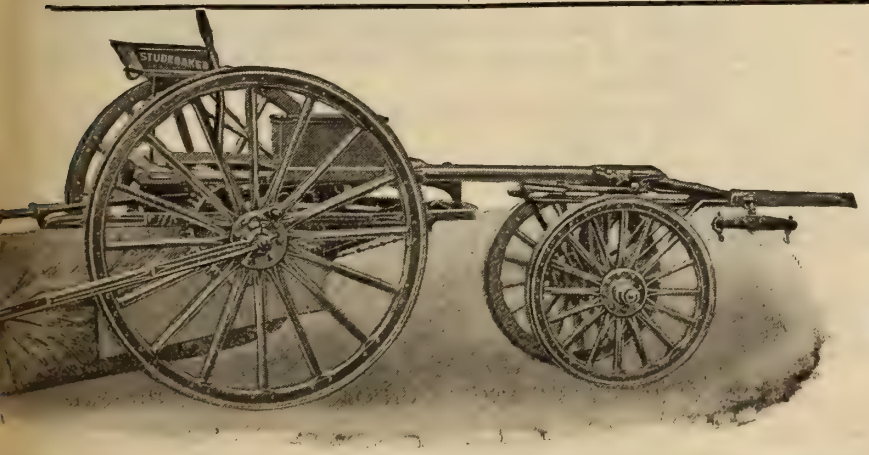

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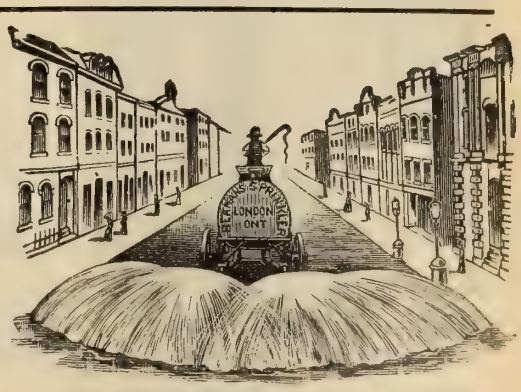

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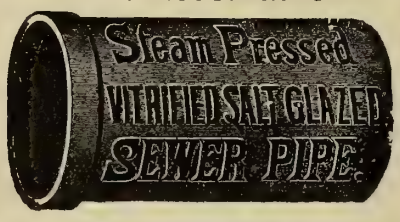

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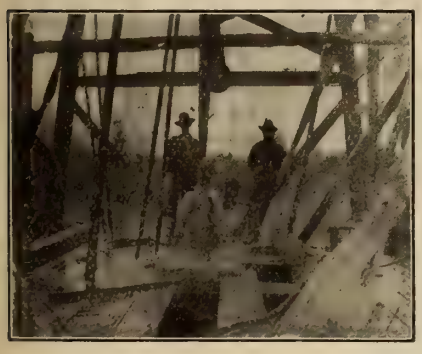

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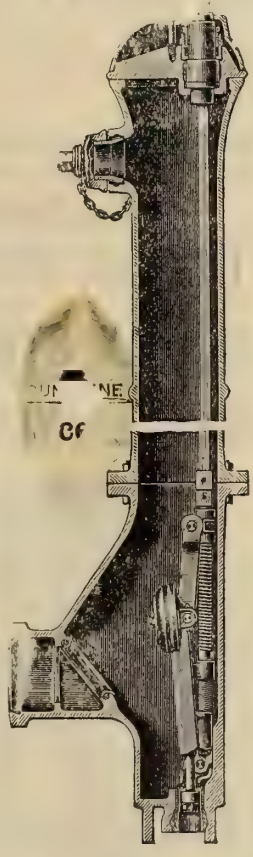

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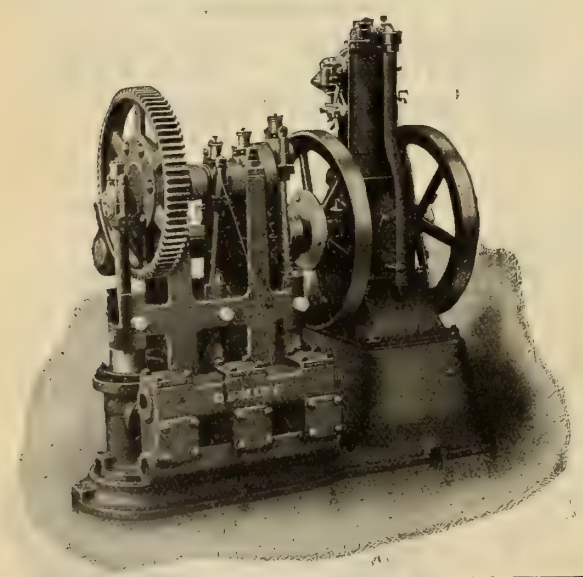
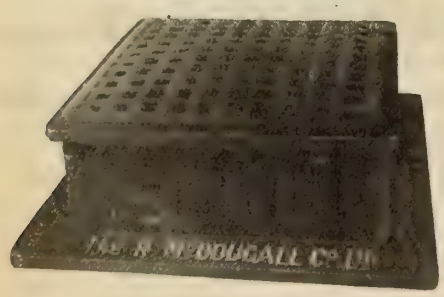


We manufacture and carry in stock
TRIPLEX POWER PUMPS . . . .
DUPLEX STEAM PUMPS . . . .
SINGLE CYLINDER STEAM PUMPS
For every service
Our 110 page Catalogue "G" containing a great deal of valuable information will be mailed on application
DARLING BROTHERS, LIMITED
Branch Offices: TORONTO WINNIPEG
Reliance Works: MONTREAL

MANHOLE COVERS and FRAMES



We have several designs and this shows the article in most general use. It is Heavy and Substantial, made from good materials and will stand any strain to which it may be subjected.
Will be pleased to furnish particulars of these, together with
CATCH BASINS, HYDRANTS, CURB BOXES, ETC.

The R. McDOUGALL COMPANY, Limited,
GALT, CANADA.

Head Office and Works,
Toronto, Ont.

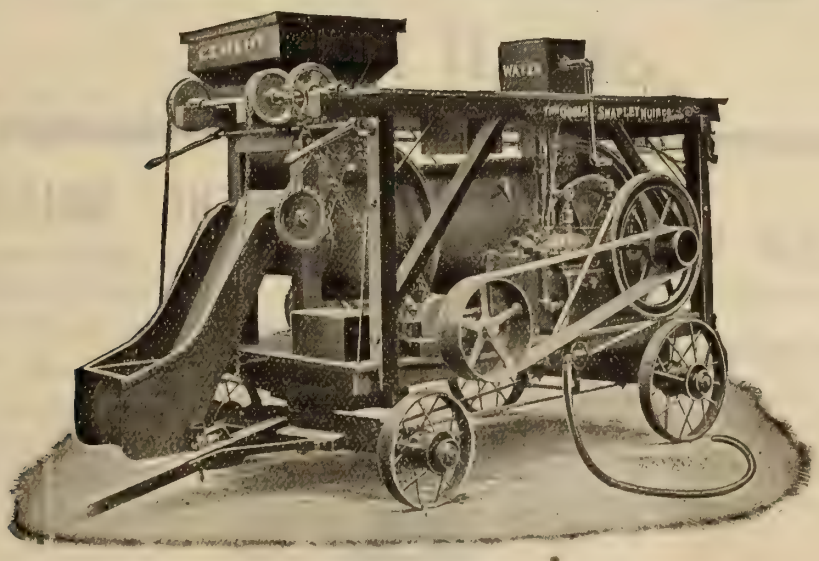
CAST IRON PIPE FOR WATER OR GAS

Special Castings,
Tees, Crosses, Flanges Pipe, Valves, Hydrants,
Stand Pipes, Valve Boxes, Drinking and Ornamental Fountains.

District Offices: MONTREAL, HALIFAX, OTTAWA, WINNIPEG, VANCOUVER, ROSSLAND

Ideal Automatic Concrete Mixers

The Only Successful Automatic Mixer Made



We also manufacture **Windmills, Tanks and Towers**
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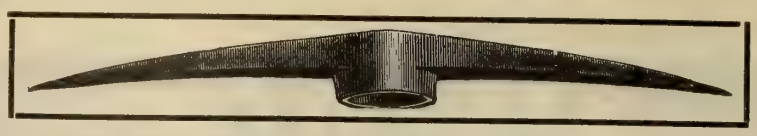
WE INVITE CORRESPONDENCE

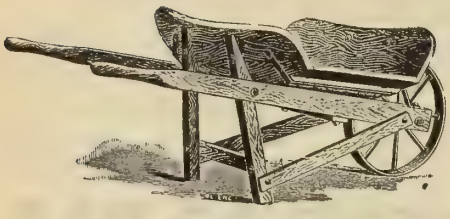
GOOLD, SHAPLEY & MUIR COMPANY, LIMITED
BRANTFORD, CANADA

PICKS



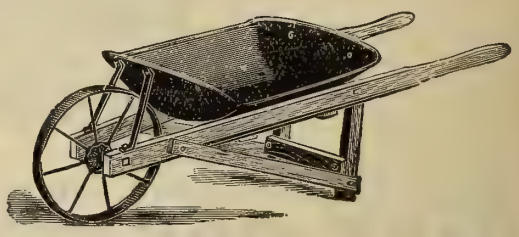
SHOVELS

WHEELBARROWS



We carry a complete stock:

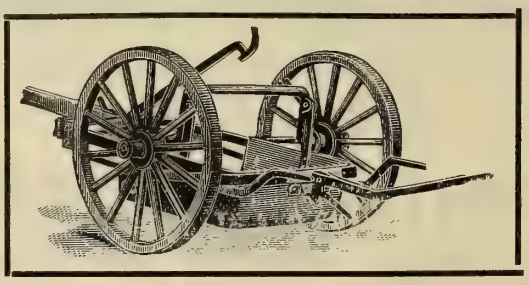
NAVVY-PAN AMERICAN
STONE, BRICK, MORTAR
FOUNDRY, COAL, COKE
and our
SPECIAL CONCRETE
BARROWS



WHEEL SCRAPERS

We can supply from stock any quantity of Wheelers in all capacities.

Scrapers are constructed from the highest grade material.



DRAG SCRAPERS

Our line of Drag Scrapers is most complete. We carry three styles in stock in all capacities.

Extremely low prices.

Immediate shipment.

Plows, Concrete Mixers, Hoisting Engines, Derricks, Etc.

CONTRACTORS' SUPPLIES

of all kinds

THE WELLS LIGHT

800, 2,500, 5,000 Candle Power

from Kerosene Oil

Used by all large Contractors, Mines, Railways, Engineers.

This is a portable, self contained light, inexpensive to operate, very satisfactory and is not affected by weather.

THE WELLS LIGHT

The "Little Wonder" Size

We have had this little light specially designed to meet the present demands.

500 Candle Power

We guarantee this light to be perfect in action and when you wish to

Turn Night into Day

you can not do better than to install a Wells Light.

LET US SEND YOU OUR SUPPLY CATALOGUE.

F. H. Hopkins & Co.

Successors to the Late James Cooper
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Dunn Bros., Winnipeg, Agents

CANADIAN

Contract Record

A Weekly Journal of Public Works, Tenders, Advance Information and Municipal Progress

This Paper Reaches Every Week the Town and City Clerks, Town and City Engineers, County Clerks and County Engineers, Purchasers of Municipal Debentures and Leading Contractors in All Lines Throughout Canada

VOL. 17. TORONTO, MONTREAL — AUGUST 1, 1906 — WINNIPEG, VANCOUVER No. 22

THE CANADIAN CONTRACT RECORD
PUBLISHED EVERY WEDNESDAY
As an intermediate Edition of the Canadian Architect and Builder.

THE C. H. MORTIMER PUBLISHING COMPANY
of Toronto, Limited.

Subscription Price, $2 per annum, payable in advance.

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The Royal Institute of British Architects, London.

Examination for Admission as Associate.

An examination for admission as Associate of the Royal Institute of British Architects, London, will be held in Toronto, from the 16TH to 23RD of NOVEMBER, 1906.

Full particulars and all information regarding this examination can be had by applying to F. S. BAKER, Honorary Secretary for Canada Mail Building, Toronto.

THE PROVINCE OF SASKATCHEWAN

DEPARTMENT OF PUBLIC WORKS

TENDERS FOR THE SUBSTRUCTURE

Of Traffic Bridge at Battleford

Sealed tenders addressed to "The Deputy Commissioner of Public Works, Regina, Sask." and endorsed "Tenders for Battleford Bridge" will be received up to 4.30 p. m., MONDAY, AUGUST 13TH, 1906, for the supply of all material and the construction of eight (8) concrete piers and two (2) abutments for a traffic bridge over the Saskatchewan River at Battleford.

About 5,000 cubic yards of concrete will be required in the work.

A certified cheque for the sum of $4,000 must accompany each tender. The cheque will be retained until the necessary contract and bond are executed and the work commenced.

The cheques of unsuccessful bidders will be returned after the contract is signed.

The right is reserved to reject any or all bids or waive any defects.

Plans, specifications and all information may be obtained on application to the undersigned.

Dated at Regina, Sask., June 29, 1906.

F. J. ROBINSON,
Deputy Commissioner of Public Works.

CITY OF SASKATOON

Province of Saskatchewan

TENDERS FOR

WATERWORKS, SEWERAGE AND ELECTRIC EQUIPMENT

Tenders will be received by the Secretary-Treasurer of the City of Saskatoon, Sask., until 8 p. m. on

TUESDAY, AUGUST 14TH, 1906

for the following works:

Contract "A"—Labor pipelaying on waterworks and sewers.
Contract "B"—Power house and chimney.
Contract "C"—Water tower and foundation.
Contract "D 1"—Cast-iron pipes and specials.
Contract "D 2"—Wooden stave pipe.
Contract "E"—Fire hydrants, valves, etc.
Contract "F"—Sewer pipes and junctions.
Contract "G"—Pumping machinery.
Contract "H"—Boilers.
Contract "J"—Electric light engine.
Contract "K"—Electric lighting equipment.

Plans and specifications may be seen at the office of the Chief Engineer, 103 Bay street, Toronto, Ont., or at the office of the Secretary-Treasurer, Saskatoon, Sask. No tender necessarily accepted.

JAS. CLINKSKILL, ESQ., Mayor, Saskatoon, Sask.; ADAM TURNER, ESQ., Secretary-Treasurer, Saskatoon, Sask.; WILLIS CHIPMAN, C. E., Chief Engineer, 103 Bay street, Toronto, Ont.

Tenders for Supply of Turbine Pumps.

Sealed tenders addressed to Ald. J. C. Gibson, chairman Fire, Water and Light Committee, for supply of two turbine pumps with electric motors for the city waterworks, will be received at the office of the undersigned up to 2.30 p. m. on

MONDAY, AUGUST 27, 1906.

Specifications and forms of tender may be obtained at the office of Col. H. N. Ruttan, City Engineer, Winnipeg, Manitoba.

Each tender must be accompanied by an accepted cheque or draft payable to the order of the city treasurer, or cash deposit for the sum called for in the form of tender supplied, which will be subject to forfeiture in case of failure on the part of the contractor to enter into a written contract with approved sureties if called upon to do so.

The city reserves the right to reject any or all tenders, or to accept any bid which appears advantageous to the City of Winnipeg.

C. J. BROWN,
City Clerk's Office, City Clerk.
Winnipeg, July 18, 1906.

Wanted Two Thoroughly Experienced Draughtsmen. None other need apply.
GEO. W. GOUINLOCK, Architect,
Temple Building, Toronto.

WANTED

Competent Architectural Draughtsman.
WICKSON & GREGG,
59 Yonge St., Toronto.

DRAUGHTSMAN WANTED

One with experience on stone work preferred. Write stating experience, salary required, etc.
ROMAN STONE CO.,
Toronto, Can.

TOWN OF STEELTON

Province of Ontario

Tenders for Waterworks

Sealed tenders addressed to the Town Clerk will be received until 8 p.m. on

TUESDAY, AUGUST 21ST, 1906

for the following works:

Contract "A" Trenching and Pipelaying, 27,000 feet.
" "C" Water Tower or Stand Pipe.
" "D" Cast Iron Pipes and Specials, about 600 tons.
" "E" Fire Hydrants, Valves, etc.

Tenders for pumping station, machinery, etc., will be called for at a later date.

Plans and specifications may be seen at the Town Hall, Steelton, or at the office of the Chief Engineer, Toronto.

J. F. SHAW, Esq., Mayor. J. ROBINSON, Esq., Town Clerk.
WILLIS CHIPMAN, C.E.
103 Bay Street,
Toronto, Ont.

$34,000.00

TOWN OF CARMAN

Debentures for Sale

Sealed tenders addressed to the Secretary-Treasurer of the Town of Carman and marked "Tender for Waterworks and Sewer Debentures" will be received up to 8 o'clock p.m. on SATURDAY, THE 25TH DAY OF AUGUST, 1906, for the purchase of Debentures of the Town of Carman amounting to Thirty-Four Thousand Dollars ($34,000.00) with payments distributed over a period of twenty years from the Thirtieth Day of June, A.D., 1906, with interest at the rate of five (5) per cent. per annum.

Principal and interest payable at the Canadian Bank of Commerce, Carman, and the debentures such that the total amount of principal and interest will be as nearly equal as may be in each year.

The highest or any tender not necessarily accepted.

Any information desired may be obtained by addressing the Secretary-Treasurer.

A. MALCOLMSON,
Secretary-Treasurer of the Town of Carman.
Dated at Carman, Man., July 18th, 190.

[FOR ADDITIONAL ADVERTISEMENTS FOR TENDERS SEE NEXT PAGE.]

CLEAN EARTH WANTED

About one hundred loads of clean earth wanted. Apply to
E. J. LENNOX, Architect,
164 Bay St., Toronto.

FOR SALE CHEAP

About 75,000 ft. Best quality

SCOTCH SEWER PIPE

Sizes 5" to 18" diameter, ex S/S "HESTIA" on wharf Halifax, N. S. and St. John, N. B. For particulars apply to
HYDE & WEBSTER,
Montreal, Que.

DEBENTURES FOR SALE

Sealed tenders will be received by the undersigned up to SATURDAY, THE 25TH DAY OF AUGUST NEXT, for the purchase of the following Debentures of the Town of Petrolia.

$6,141.18 Local Improvement Debentures dated 1st August, 1905, bearing interest at 4 per cent. and repayable in 20 annual payments of $452.03, principal and interest, payable on the 31st day of December each year; $4,055.88 Local Improvement Debentures, dated 1st August, 1906, bearing interest at 4½ per cent. and repayable in 20 annual payments of $309.49 principal and interest, payable on the 31st day of December each year. The foregoing have been legalized by Special Act of the Legislature.

$17,000.00 School Debentures dated 1st August 1906, bearing interest at 4½ per cent. repayable in 30 annual payments of $1,043.65, principal and interest, payable on the 31st day of December each year.

The highest or any tender not necessarily accepted.

For further particulars apply to the undersigned.

JOHN McHATTIE,
Town Clerk

TOWN OF FORT FRANCES
PROVINCE OF ONTARIO

TENDERS FOR

WATERWORKS AND SEWERAGE

Contract "A" All labor necessary for constructing the Waterworks Distributing system and certain materials therefor.
Contract "B" All labor for constructing Sewerage System and certain materials therefor.
Contract "C" The supply and erection of an Elevated Steel Storage Tank.
Contract "D" Supplying Cast Iron Pipes and Special Castings.
Contract "E" Supplying Gate Valves and Fire Hydrants.
Contract "F" Supplying Vitrified Tile Pipes.
Contract "G" Supplying Cast Iron Manhole Covers, Catch-Basin Covers, etc.

Sealed tenders will be received by the Town Clerk, until 8 p. m. on WEDNESDAY, AUGUST 15TH, 1906.

Plans and specifications may be seen and forms of tenders obtained at the office of the Town Clerk or at the head office of the Chief Engineer.

J. C. BARR, Esq., Mayor. W. H. ELLIOTT, Esq., Town Clerk.
JOHN GALT, C.E. & M.E.,
Chief Engineer,
Toronto, Ont.

CONTRACTS OPEN.

QUEBEC, QUE.—A new school is to be erected in St. Roch near Laliberte street.

BEAVER, MAN.—R. H. McLeod is preparing to rebuild his store recently burned.

NINGA, MAN. — Mr. Fergus has purchased a lot on which to srect a new residence.

EASTVIEW, SASK.—The Methodist congregation are considering the erection of a new church.

PIERSON, MAN. — The Northern Bank are considering the erection of a new building here.

NEEPAWA, MAN.—M. H. Fieldhouse has taken tenders for alterations of the Central school.

VONDA, SASK.—Dufor & Beaudoin are calling for tenders for the erection of a three-storey hotel.

TOGO, SASK.—The Western Canada Milling Company intend erecting a 50,000 bushel elevator here.

SOUTH QU'APPELLE, SASK. — The by-law has been carried to have a new town hall constructed.

CARLYLE, SASK. — A by-law has been carried to raise $5,000 by debentures for local improvements.

BLUE SEA LAKE, QUE.—The C. P. R. are said to be considering the erection of a summer hotel here.

AHUNTSIC, QUE.—Tenders have been taken for construction of sewage and waterworks system in the town.

PRINCE ALBERT, SASK.—A by-law to raise $62,000 for removal of electric light power house has been carried.

VESTA, ONT.—The construction of a new bridge on the 17th side-road is being considered by the Councillors.

REGINA, SASK.—It is said that the Hospital Board is negotiating for a site on Dewdney street for a new building.

PROTECTIONVILLE, N. B. — L. Smallwood will receive tenders up to August 4th for erection of a school house here.

CARMAN, MAN.—J. McKenzie has taken tenders for the erection of a school building S. D. No. 518. E. Watson, architect.

ENDERBY, B.C..—G. Rosmon will receive tenders up to August 1st for the installation of a system of waterworks for the city.

CREELMAN, SASK.—It is said that the Western Canada Milling Company, of Winnipeg, will erect an elevator here this summer.

SHOAL LALE, MAN.—A by-law has been carried to grant a loan of $15,000 towards the erection of a grist mill and elevator here.

MOOSOMIN, SASK.—A by-law will be submitted to the ratepayers for installation of waterworks system, cost about $30,000.

GLACE BAY, N.S.—The Workmen's Co-Operative Society have purchased Victoria Hall which they will have extensively remodelled.

BRODHAGEN, ONT.—F. Jacob will receive tenders up to August 13th for construction of the Logan road drain. Plans at his office.

WATERLOO, ONT. — W. Lismer has purchased a lot corner of William and Victoria streets on which he will erect a brick residence.

ST MARY'S ONT.—New plans for the Post Office building have been prepared and tenders for its erection will be received up to August 18th.

CALGARY, ALTA. — John Stocks, Public Works Department, Edmonton, has taken tenders for the erection of new Normal school building here.

BOISSEVAIN, MAN.—The Town Council have decided to engage an engineer to estimate cost of proposed water and sewerage systems.

CARLETON PLACE, ONT.—The Council gives notice of its intention to construct concrete sidewalks on Flora, William, Lake and High streets.

BROCKVILLE. ONT.—The Council are considering the opening of Brock street west of Perth street and construction of a bridge over Sheppard's Creek.

SHERBROOKE, QUE.—The plans for the new Sacred Heart Hospital have been approved by Mgr. LaRocque and the construction of the building will soon begin.

VICTORIA, B.C.—The B. C. Permanent Loan Company have purchased the Heathorn Block on Government street, which it is expected will undergo extensive alterations.

SYDNEY, N.S.—P. McLelland, proprietor of the Grand Hotel, has purchased a site corner Dorchester and Dodd streets, on which it is expected he will erect a large hotel.

BRACEBRIDGE, ONT.—The Council gives notice of its intention to construct cement sidewalks on Manitoba, Market, Ontario, Quebec, Dominion and McMurray streets.

ST. LEON SPRINGS, QUE.—It is said that MacKenzie & Mann intend extending a branch of the C. N. R. to this place and erecting an up-to-date summer hotel.

GUELPH, ONT.—A surveying party under Engineer John Davis, of Alton, are locating the proposed extension of the Guelph Radial Railway to Puslinch lake and Hespeler.

BEAMSVILLE, ONT.—On August 6th a by-law will be voted on to raise $12,000 for new sidewalks, etc., also one to grant free water and free site and tax exemption to the canning factory.

ST. JOHN, N.B. — Lord Aylmer, Inspector General of Canadian Forces, considers that defences should be established at Partridge Island. He stated that this city needed a new drill hall also.

ST. CATHARINES, ONT. — The Niagara, St. Catharines & Toronto Railway Company are seeking permission to build a branch line on Jeneva street to connect their lines on Welland and St. Paul streets.

SASKATOON, SASK.—The C. P. R. have secured property on 33rd street, from the river to Prince Albert line for the erection of their new freight sheds and a site on 23rd street for the new station.

ROSTOCK, ONT. — D. J. Smith, reeve, has taken tenders for the construction of a concrete cement culvert on the Huron Road, also for a cement culvert and bridge on concession road 2 township of Ellice.

KAMLOOPS, B.C.—The Council are taking steps to raise $45,000 for a sewerage system.—W. H. Edmonds has taken tenders for the erection of an eight-roomed school building. W. T. Whiteway, architect, Vancouver.

WELLAND, ONT.—Tenders will be received up to August 4th for construction of a brick manse for the Presbyterian church. Plans with George Ross, engineer.—T. Rogers has bought a site on Locust street for three dwellings.

HAMILTON, ONT.—Charles Mills, architect, is preparing plans for the new station for the Cataract Power Co.—The City Engineer has recommended changes in the filtering basins, a new conduit pipe to be laid from the northern basin to the pump house.

PETERBORO, ONT.—The Toronto Savings & Loan Company intend opening a street through the property purchased from the Sugar Beet Co. and will erect twenty residences.—The members of St. Peter's Total Abstinence Society are planing for the erection of a new hall.

COLLINGWOOD, ONT. — The Council are considering the matter of having the main street paved with vitrified brick or asphalt. — John Wilson, arcitect, will receive tenders up to Augus, 10th for construction of two reinforced concrete arch bridges, one on Sixth street and one at Kirkville.

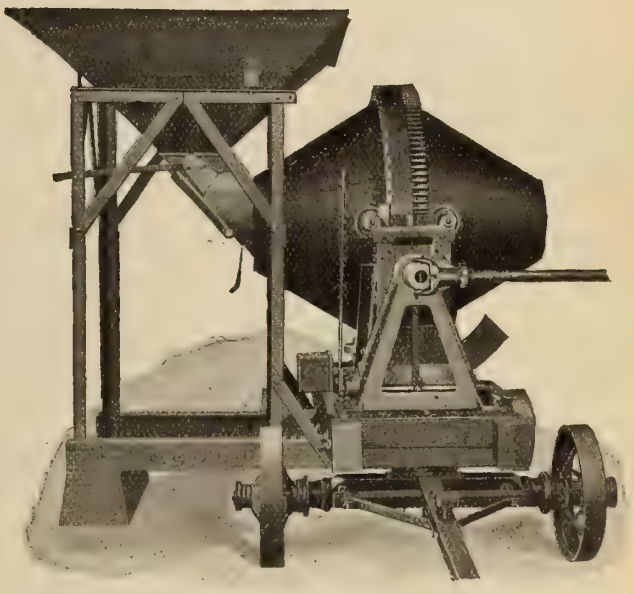
CORNWALL CENTRE, ONT. — John Mullin, Township Clerk, will receive tenders up to August 31st for drainage work on the McDonald Creek drain, also

Sterling Roller Bearing Barrows.

Cyclopean Concrete Buckets.

ANYTHING FOR HANDLING CONCRETE

Complete Rock Crushing and Concrete Mixing Plants Designed and Erected.



Smith Concrete Mixer with Batch Feeding Hopper

W. H. C. MUSSEN & CO.

Railway, Mining and Contractors' Supplies

MONTREAL

on the Bonville Creek drain in the township of Cornwall. Plans with above named and with W. H. Magwood, engineer, Cornwall.

WOODGREEN, ONT. — Tenders will be received by W. H. Wentworth also at Town Hall, Glencoe, up to August 4th, for erection of a concrete arch on Longwoods road. Plans with W. H. Waterworth and C. Talbot, engineer, London.

STEELTON, ONT. — J. Robinson, Town Clerk, will receive tenders up to August 21st for trenching and pipe laying, 37,000 feet, water tower, cast iron pipe and specials, fire hydrants, valves, etc. Tenders for pumping station, machinery, etc., will be called at a later date. Plans at the Town Hall or with W. Chipman, C.E., 103 Bay st., Toronto.

CHATHAM, ONT.—N. Pinsoneault has secured a building permit for erection of a building on Pattison avenue, cost $1,800.—J. L. Wilson & Sons, architects, have taken tenders for the erection of a branch building for the Dominion Bank. —It is reported that a large beet sugar factory will be located here.

DELIBAIRE, QUE. — F. Gelinas, Department of Public Works, Ottawa, will receive tenders up to August 18th for construction of a wharf at Grands Mechins, Rimouski County. Plans with P. Beland, Post Office, Quebec, C. Desjardines, Post Office building, Montreal, with Postmaster here and at the Department of Public Works, Ottawa.

STRATHCONA, ALTA. — W. H. Martin & Co. have taken tenders for the works in connection with the completion of Duggan street public school.—T. E. McLean has taken tenders for the erection of a four-roomed brick school on Lumsden avenue.—G. F. Downs will receive tenders up to August 1st for the purchase of $16,000 town debentures.—H. A. Magoon, architect, has taken tenders for the erection of a brick church for the Presbyterian congregation.

VANCOUVER, B. C. — Grant & Henderson, architects, have prepared plans for the alteration of St. Andrew's Presbyterian church, cost $10,000.—The City Council are seeking a site for the establishment of the proposed incinerator. — The directors of the Y.M.C.A. are making preparations for an extension to their building, cost $5,000. — Building permits have been granted to the Star Laundry Co., for building on Richard street, cost $2,000 and to Mr. Harrison, dwelling on Howe, street, cost $1,600.

LETHBRIDGE, ALTA.—The waterworks debentures by-law has been carried. — Building permits have been issued as follows: G. C. Crapley, two story dwelling, Crabb street, $1,500; Smith Bros & Wilson, cottage, with stable, Bompas street, $1,500; N. W. Jobbing & Company, two story and basement, cement block and brick warehouse, corner Redpath and Smith streets, $23,000; Roy Shafer, dwelling, Argyle street, $1,500; Rex Virtue, 2 story dwelling, $2,500; Theo Odmark, dwelling, $1,500; Geo. Parry, brick dwelling, Glyn street, $1,500; W. A. Buchanan, two story frame dwelling, $2,000; Ernest Downing, dwelling, $1,500.

OTTAWA, ONT.—N. J. Kerr, City Engineer, will receive tenders up to August 1st for construction of asphalt pavement on Laurier avenue and Charlotte street.—The Transcontinental Railway Commissioners will call for tenders for eight steel bridges for the Quebec-La Tuque section of the road.—A site has been secured for the plant for the new pulp and paper mill to be established here.—Plans have been approved by the American Bank Note Company for an extension of its premises through from Wellington to Sparks street.—Building permits have been issued as follows: A. E. Barlow, double brick house, Argyle ave., cost $7,800; H. F. Williams, brick house, First ave., cost $2,500.

MONTREAL, QUE.—The Monarch Motor Co., recently organized purpose erecting an automobile factory here.—A. P. Williams has purchased property corner of St. Catherine and Drummond streets upon which he will erect a building.—The following building permits have been issued: Canadian Rubber Company, factory on Gain street, $10,000; M. B. David, corner of Pine and St. Lawrence streets, stable; $2,000; S. G. Denault, Forsyth street, dwelling, $1,000; A. Larocque, Sherbrooke street, house, $4,000; C. Montbleu, Frontenac street, dwelling, $2,400; Kemp Manufacturing Co., brick and stone warehouse, St. Antoine street, $30,000.

WINNIPEG, MAN. — The Fire, Water & Light Committee will receive tenders up to August 13th for supply of brass goods.—S. Mulvie has taken tenders for erection of a brick school, corner Beverley, Wellington and Simcoe streets. —James & James, contractors, are considering the erection of a planing mill in the western part of the city.—Tenders will soon be called for the improvements to be made at St. Andrew's Rapids.—The Committee on Works have taken tenders for construction of asphalt pavement on McMillan avenue and Walnut street, for sewers on Alverstone east, Pembina street, Logan and McRae avenues and Dundurn place also for a number of granolithic sidewalks.—The Council gives notice of its intention to construct macadam pavements, a number of granolithic sidewalks, sewers in Wetherdon, Alexander and Notre Dame avenues and Pembina and Parr streets also asphalt pavements on Buell avenue, cost $7,100 and Martha streets, cost $12,683 and other improvements.—The Health Com will receive tenders up to August 2nd for supply of from 1,000 to 2,000 galvanized iron garbage receptacles.—Plans are being prepared for alterations in the interior of the Court House.

TORONTO, ONT.—F. H. Herbert, architect, has called for tenders for improvements to be made in York Chambers and Toronto Chambers for MacKenzie & Mann.—The same architect, has called for tenders for remodelling residences on Willcocks street for J. W. Lee, and on Roxborough street for J. McLeod.—Mr. Herbert has prepared plans for improvements in the building, 148 Yonge street, to be occupied by the Butterick Publishing Company, of New York.—He has also taken tenders for erection of a pair of residences on George street for W. A. Mitchell.—The city architect is preparing plans for extension to Rose avenue firehall, cost about $10,000.—Victoria University purpose having their new Carnegie library erected on the Drynan Estate west of the college.—Tenders have been called for masonry, brickwork and excavating for dwelling. Plans at 329 Davenport road.—W. Brand, 728 Spadina avenue, has taken tenders for plumbing, roofing, tinsmithing, painting and heating of a house on Bloor street.—The Royal Bank have purchased the property 8 and 10 King street east, on which it is expected they will erect an office building.—The Dominion Henderson Bearings, Limited, are seeking a site for a factory building.—Tenders will be received by the Board of Control up to August 14th for supply of appliances and equipment for installation of street gas lamps. They have also taken tenders for construction of asphalt pavements on Gerrard and Grace streets, Dovercourt road and Deleware avenue; bitulithic pavement on Laurier avenue, also for a number of concrete sidewalks and sewers. —The Civic League and other organized bodies have formed a committee to prepare plans for construction of a number of working men's houses.—A site has been secured on Adelaide street, between York and Simcoe, for the new Central fire station for which plans are being prepared and tenders will soon be called. —St. Mattews church are considering the establishment of a new mission near the corner of Logan and Eastern avenues. —The Committee on Works have recommended the adoption of the City Engineer's report for the sea wall to be erected from the old fort to Spencer avenue, cost $75,000.—The City Council gives notice of its intention to construct the following works: Tile pipe sewer on Danforth avenue, $11,630; vitrified block pavement on Liberty street, $11,601; asphalt block pavement on West Market street, $6,583; asphalt pavements on Chestnut street, $17,112; Richmond street, from Bay to York, $6,301; Adelaide street, from York to Spadina avenue, $17,213; Bloor street, from Yonge to Sherbourne (resurfacing) $9,120, also pavements on several streets and cement concrete sidewalks.—Tenders will be received up to August 4th for mason and carpenter work for the new St. Cyprian's church, Manning avenue. Plans with R. B. McGiffin, architect, 14 Leader lane.—Tenders will be received up to August 8th for erection of Oddfellows' Hall on Broadview avenue. Plans at 734½ Queen street. — Tenders will be received at 79 Howland avenue for contracts for painting, plumbing, plastering, slating, concreting, etc. —Building permits have been issued as follows: Geo. Morrin, 3-storey brick store and dwelling, College street, near Grace, cost $3,500; Jos. McCarron, pair 2-storey brick stores and dwellings, Bloor street, near Manning ave., cost $8,000; Alfred Hall, 2-storey and attic roughcast dwelling, brick front, Brock ave., near Bloor street, cost $2,000; D. Whetstone, 2-storey brick and stone store, 840 College street, cost $4,000; E. C. Tuckett, 2-storey brick and stone dwelling, Conduit street, cost $2,600; E. C. Tuckett, pair 2-storey brick and stone dwellings, Dundas street, near Conduit, cost $4,000; R. Dunkley, 2-storey and attic brick dwelling, Lansdowne ave., near Marion street, cost $2,900; A. D. Williams, pair 2-storey and attic brick dwellings Grace street, cost $5,000; A. Morrin, 2-storey brick dwelling, Curzon street, cost $2,600; Dr. Thos. Butler, pair 2½-storey brick dwellings, Euclid ave., cost $4,600; Thos. Morrison, pair 2-storey brick dwellings, West ave., cost $4,000; Wm. Pudifin, pair 2-storey brick dwellings, Gladstone ave., cost $5,000; F. McMahon, 2-storey and attic brick dwelling, Dundonald street, cost $5,500; T. Garnet Vale, 2-storey brick dwelling, Simpson ave., cost $2,400; Edward Drew, three 2-storey brick dwellings, Palmerston ave., near Barton, cost $7,000; Robert Kennedy, 2-storey sand lime brick dwelling, 169 Grace street, cost $3,000; A. Norman, 2-storey and attic brick dwelling, 91 Walker ave., cost $3,300; Arlington Co., 1-storey brick addition to factory, Fraser ave., cost $3,000; J. Forde (in trust), 2-storey and attic brick dwelling, corner Bloor and Shaw streets, cost $2,800; Grace Hospital, brick alterations to hospital, Huron street, cost $3,500.

FIRES.

Five buildings at Vananda, B. C, totally destroyed.—Saw mill of Alfred West, near Chipman, N.B., loss $10,000. —Warehouse of Sanderson, Pearcy & Company, 65 Adelaide street west, Toronto, damage $10,000.—Comb and novelty works of J. D. Gettman, Berlin

Ont., loss $8,000. — Dominion Iron & Steel Company's rail mill, Sydney, N.S., damage $2,000.—Furniture store of J. W. Jones, Grand Forks, B.C., loss $30,000.—Warehouse of Thomas Marian and the dock, Rapides des Joachims, Que., loss $10,000.—Grist mill of McCracken Bros., Tiverton, Ont., totally destroyed. —Cheese factory of Holmes & Merkley, near Brockville, Ont., totally destroyed. —Store and dwelling of J. Hardley, Beresford, N. B., loss $5,000. — Four business places at Coldwater, Ont., badly damaged.—Boarding house and men's quarters of the P. Burns & Company's plant, at Calgary, Alta., completely destroyed.

CONTRACTS AWARDED.

EGANVILLE, ONT. — Erection of town hall: John D. McRae, successful tenderer, $11,540.

COBOURG, ONT.—The Crossen Co. have secured the contract for 100 box cars for the C.N.R.

SOUTH QU'APPELLE, SASK. — Erection of furniture store for A. T. Whiting: W. K. Wilson, contractor.

CHILLIWACK, B.C. — Erection of Public building: P. Peebles, New Westminster, contractor, cost about $4,000.

HALIFAX, N.S.—Iron railing for public garden: Canada Foundry Company, Toronto, successful tenderers at $9,000.

DURHAM, ONT. — Construction of C.P.R. branch from Proton to Walkerton, 40 miles: McDonald & Stephen, contractors.

VICTORIA, B.C.—Alterations and additions to Duncan block for Dr. Jones: W. A. Gleason, contractor; S. McClure, architect.

NORTH BAY, ONT.—Construction of granolithic walks: S. J. Barlow & Co. Guelph, contractors at 15 cents per square foot.

ESQUIMALT, B.C. — Construction of hydrographic steamer: British Columbia Marine Railway Co., contractors, cost $143,000.

LISTOWEL, ONT. — Construction of Listowel branch of the Guelph and Goderich railway: Barnabas Gibson, Toronto, contractor.

CORNWALL, ONT.—Construction of McGillis and St. Andrew's bridges: Concrete work, Morpaw & McDonald; steel work, Hamilton Bridge Works Co.

BOLTON, ONT.—Installation of Kelsey system of warming and ventilating in Presbyterian church: James Smart Manufacturing Co., Brockville, contractors.

PETERBORO, ONT. — Construction of the Georgian Bay & Seaboard branch of the C.P.R. from this city to Victoria Harbor: Toronto Construction Co., Ltd., contractors.

CARMAN, MAN. — Laying of sewer pipes and water mains: Wallar & McKenzie, Winnipeg; wooden pipes for water mains, Canadian Pipe Company, Vancouver.

WINNIPEG, MAN. — Construction of new police station: Sharpe & May, contractors, cost about $100,000. Hooper & Walker, architects. — Supply of 20,000

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HAMILTON, ONT. — Supplies for Brantford & Hamilton Electric Railway: Rails, Dominion Steel Company; ties, Manitoulin Lumber Co.; electric supplies, Canadian Westinghouse Co.

OTTAWA, ONT. — Enlargement of premises of the "Two Macs" Co., corner of Bank and Sparks' streets: Excavation and masonry, Hallbrook & Sutherland; carpentry, Ald. Hopewell.

VANCOUVER, B.C. — Erection of four-story building, corner Granville and Robson streets for Dr. Lefevre and W. Farrell: Gribbel & Skene, Victoria, contractors. Saunders & Lawton, architects.

MOOSE JAW, SASK. — Erection of Methodist church, sub-contracts: Heating and plumbing, Moose Jaw Hardware Company; iron and steel work, Moose Jaw Machine Works Company; cut stone, Peter Lyall & Son, Winnipeg; ordinary stone, Riddell & Cline.

FREDERICTON, N. B. — The Allis-Chalmers Bullock Limited, Montreal, have secured the contract for the municipal pumping engine to consist of an "Allis" high duty horizontal double acting crank and fly wheel plunger pump, capacity 1,500,000 gallons for ordinary service and 4,000,000 for fire service.

OWEN SOUND, ONT.—Extensions of electric light and gas works: Electric department—brick work, W. H. Sinclair, $1,350; carpenter work, Woolrich & Leslie, $1,065; roofing, T. I. Thompson, $245. Gas department—brick work, W. H. Sinclair, $1,975; carpenter work, G. H. Buzza, $266; galvanized iron work and plumbing, Christie Bros. & Co., $615.

KENORA, ONT.—The Allis-Chalmers-Bullock Limited, Montreal, have secured the contract for the municipal lighting plant, consisting of three alternating current generators, of the water-wheel type, each 625 k.w. 2,400 volts, 3 phase, 60 cycles, 150 r.p.m. with two direct current generators, each 175 k.w. 120 volts, 175 r.p.m. to be used as exciters. The contract includes switchboard and other accessory apparatus. The plant will be built at the works of the company in Montreal.

The Canadian Society of Civil Engineers announce a trip to British Columbia in September. They purpose leaving Montreal September 8th by C.P.R. and propose visiting Winnipeg, Calgary, Banff, Field and Glacier on their journey.

Mr. George Dunlap, of the Perfection Cement Block Co., 155 Front St., Vancouver, B. C., entertained a number of contractors and builders recently at the company's works. The visitors were shown through the plant and viewed the process of making the building blocks.

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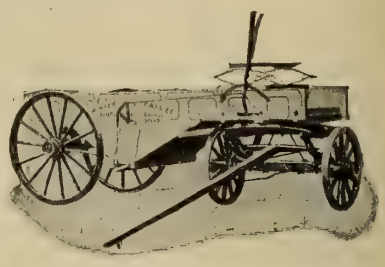

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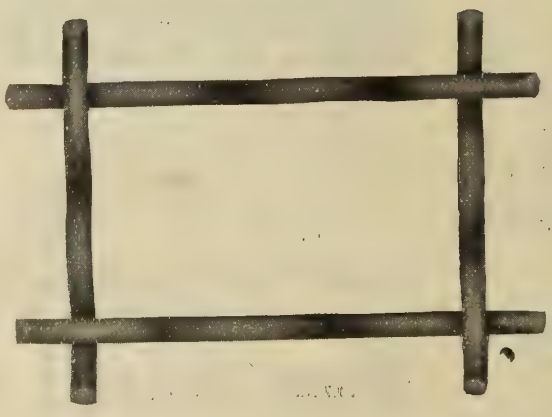

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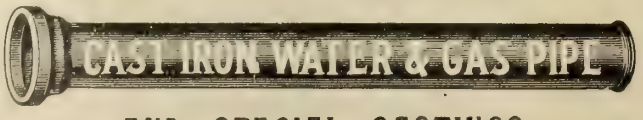

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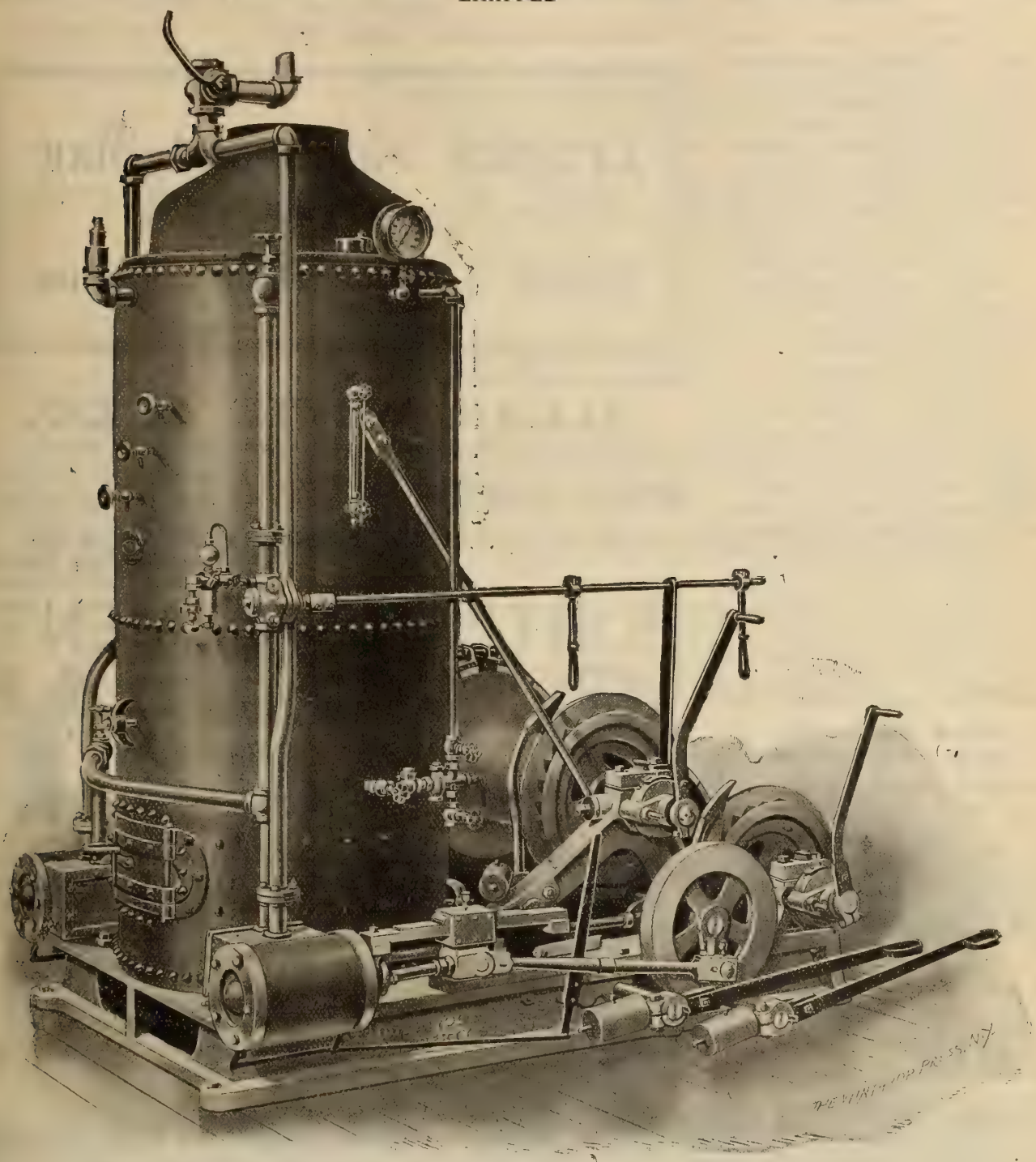

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German Canadian Smelting & Refining Company, Limited, Toronto, incorporated, capital $1,000,000. Directors, T. E. McCraken, F. F. Philips, J. E. Morden, L. Shunk and J. R. Roaf.

Desmarteau Plumbers' Supply Company, Montreal, incorporated, capital $195,000. Promoters J. A. Desmarteau, H. Herbert, P. Bilaudeau, H. Hamel, and others.

Ottawa Pulp & Paper Company, Limited, Ottawa, incorporated, capital $25,000. Promoters D. Armour, V. E. Mitchell, E. F. Surveyer, and others all of Montreal.

Arundel Lumber Company, Limited, Ottawa, incorporated, capital $100,000. Promoters, G. H. Perley, W. G. White, C. E. Read, F. W. Avery, and E. J. Graham.

Mr. J. Scales, stone mason and a British Columbia pioneer, died at Nanaimo, B. C., on July 13th.

An office for the sale of builders' supplies and material of all kinds is being opened in Edmonton, Alta., by S. J. Gorman and S. A. Clancy.

Mr. David Benzy, Toronto, has been appointed city engineer of St. Catharines, to take the place of Mr. R. E. Speakman, who has lately retired from that position.

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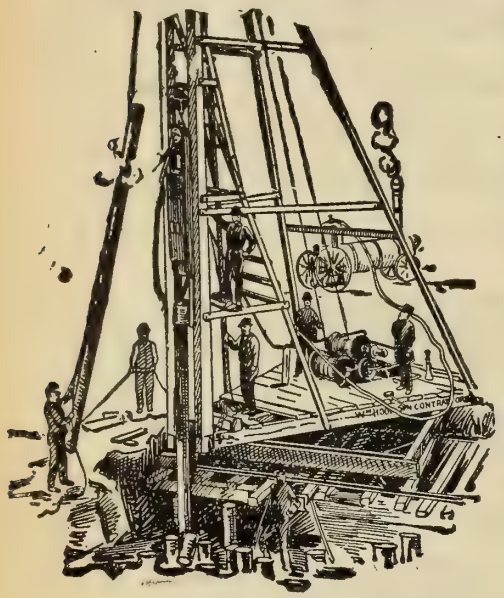

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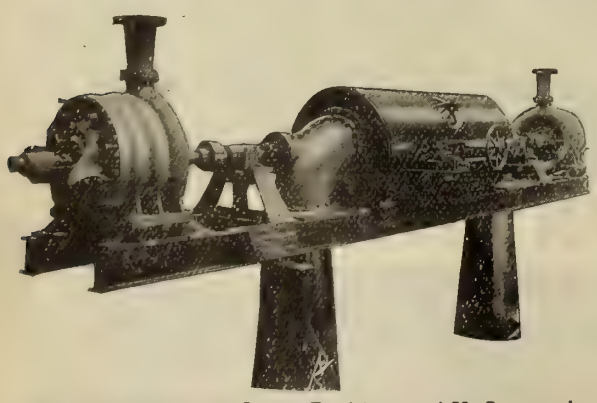

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" Buff	35 00
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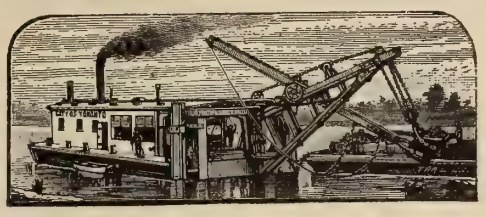

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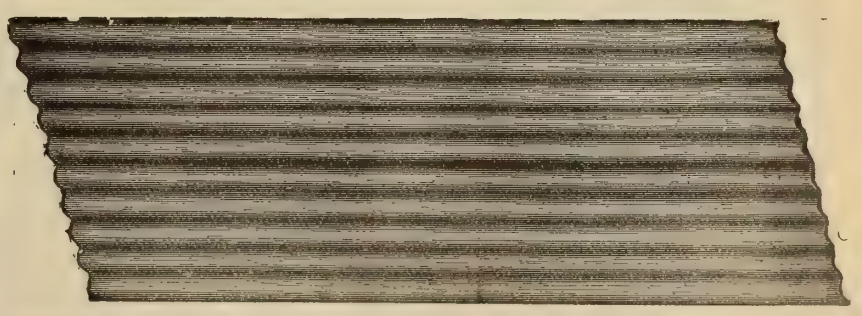

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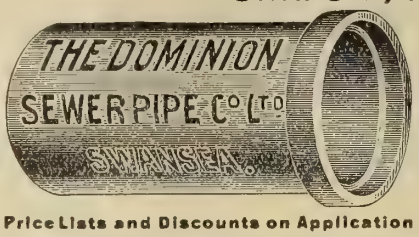

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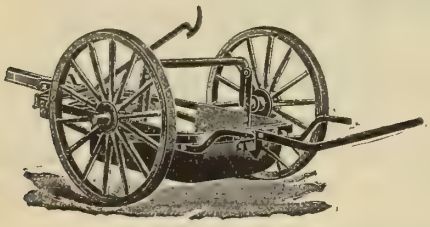

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BY

The City Engineer of Toronto for 1903-4

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Year.	No Samples Tested.	Soundness Faiji Test.	Specific Gravity	Residue in Test on No. 100 Sieve	Setting Time in Minutes		Tensile Strength in pounds per square inch.									
							Neat.					3 (Sand) to 1 (Cement)				
					Initial	Final	1 dy.	7 dys	28 dys.	3 mos	1 yr.	1 dy.	7 dys.	28 dys.	3 mos.	1 yr.
1903	20	O.K.	3.135	2.1	162	345	307	701	783	827	*	74	214	299	367	*
1904	44	O.K.	3.150	2.0	132	342	300	744	848	914	938	86	262	354	401	427

* Tests for 1 year were not completed when records closed. 1905 report not yet issued.

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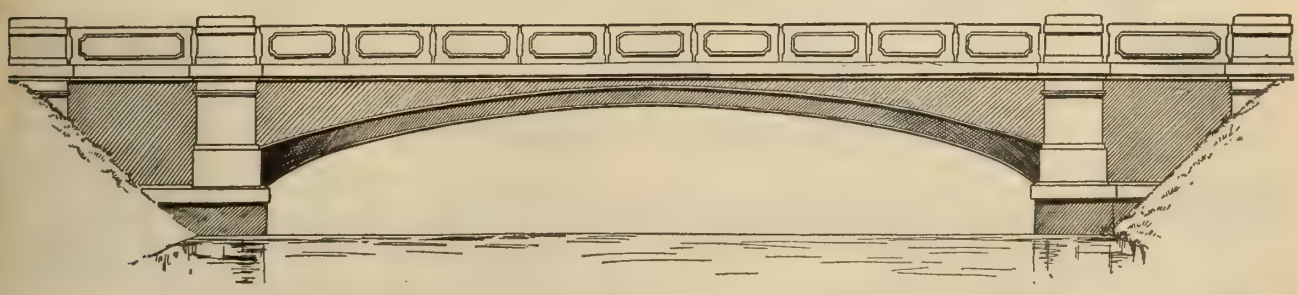

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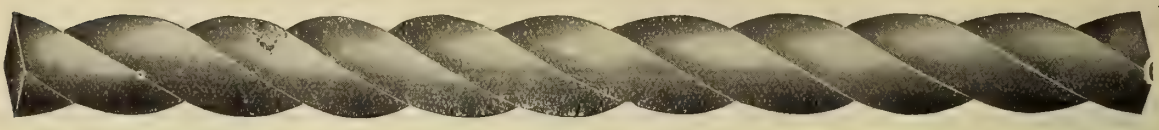

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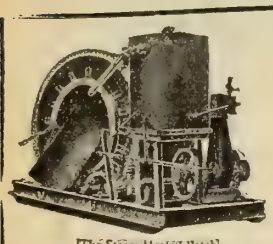
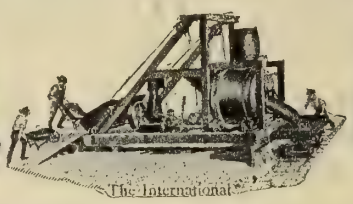
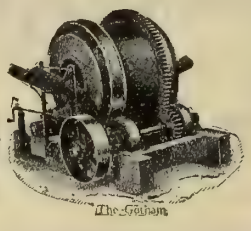
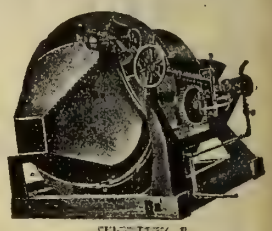

The Steam Heated Batch

The Stanley


The International


The Gotham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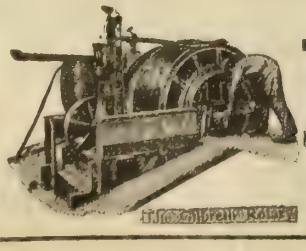
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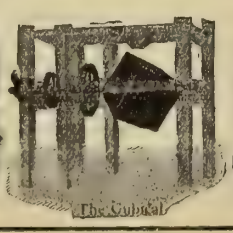
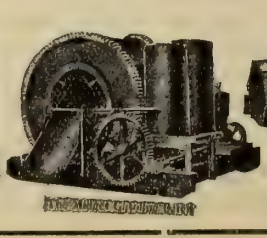

The Cubical



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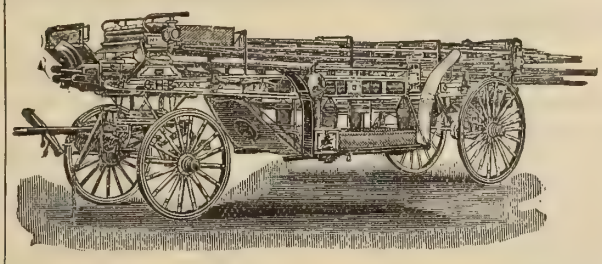

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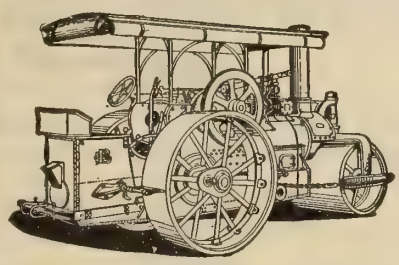

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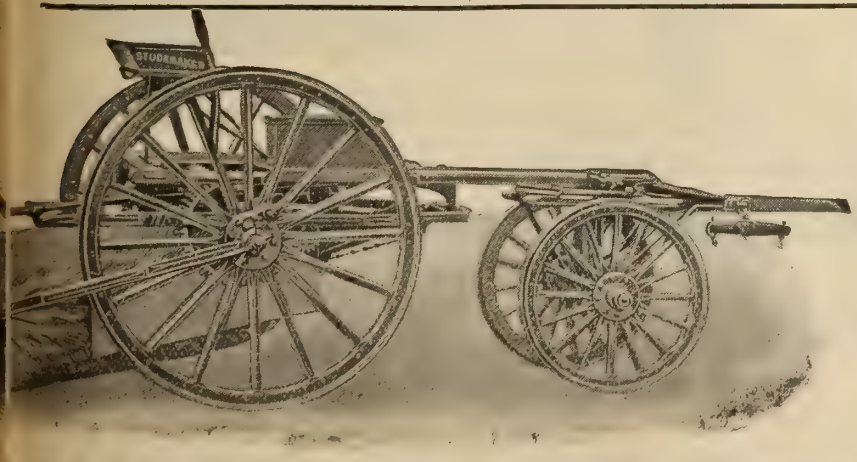

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Employed in cement walks, kerb and gutter, Paving and Building Construction. We can do work QUICKER, CHEAPER, BETTER, than small contractors. . . . . .

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B. V. HOLE, Manager. *LONDON, ONT*

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MANUFACTURERS OF
ASPHALT BLOCK PAVING
Information and samples furnished municipalities on application.
Main Office: WINDSOR, ONT. Works: WALKERVILLE, ONT.

THE CANADIAN SEWER PIPE CO.
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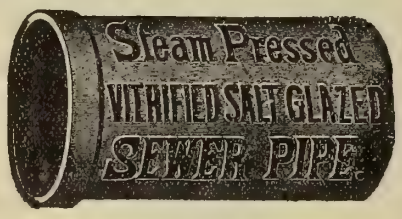

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Inverts for Brick Sewers
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PORTLAND CEMENT
For Immediate Delivery

The above Cement we fully guarantee to fulfil the requirements of Canadian and American Societies of Civil Engineers.

Large stock always carried at Fort William, Port Arthur and Duluth.

Telegraph, Telephone or write for prices.

STINSON-REEB BUILDERS' SUPPLY CO. Limited
MONTREAL, P. Q.

REGINALD LAWSON
WESTERN REPRESENTATIVE, UNION BANK BUILDING
Phone 3397 WINNIPEG, MAN

For the Province of Saskatchewan:
REGINA STORAGE AND FORWARDING CO. — REGINA

FOUNDATION OF ROADS is the subject now under most earnest investigation by Engineers throughout the World poor foundations and good surfaces are found everywhere—result, short lived roads.
THERE IS NOT ONE FOUNDATION ON THE MARKET TO-DAY THAT PROPERLY SUPPORTS THE SURFACE. The steel rail and the wooden cross tie is always the same, but the highway is a different thing; different surfaces and different foundations are required for different services. We have these different foundations; they DO properly support the surface, and, IN OTHER WAYS, they give a life to the surface that was never before even contemplated.
The Nash Road, Borough of Brooklyn, N.Y. City, U.S.A

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CIVIL ENGINEER
Water Works, Water Powers
Sewerage Systems, Railways
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204 St. James Street
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Stone Crushers and Grinders
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Concrete and Macadam Stone

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CONTRACTOR
PETROLEA, ONT.
Driller of Oil, Gas, Salt or Artesian Wells. Deep Wells a Specialty.

Contracts taken in any part of Canada. Several years experience in Artesian Wells for Municipal Water Works. Estimates or geological information cheerfully furnished.
REFERENCES GIVEN

- - - MACHINE BANDED WOOD STAVE WATER PIPE - - -

High pressure pipe for Water Works Systems, irrigation power plants, etc. Sizes 2" to 24", half the cost of cast iron. Write for Catalogue.
PACIFIC COAST PIPE CO., LTD. Box 563, Vancouver, B. C

W. & F. P. CURRIE & CO.
345 St. James St., Montreal
Importers of
SEWER PIPES,
CULVERT PIPES, ETC.
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FLUE COVERS,
FIRE BRICKS,
FIRE CLAY,
WHITING.

PORTLAND CEMENTS,
HIGH GRADE ENGLISH
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PLASTER OF PARIS
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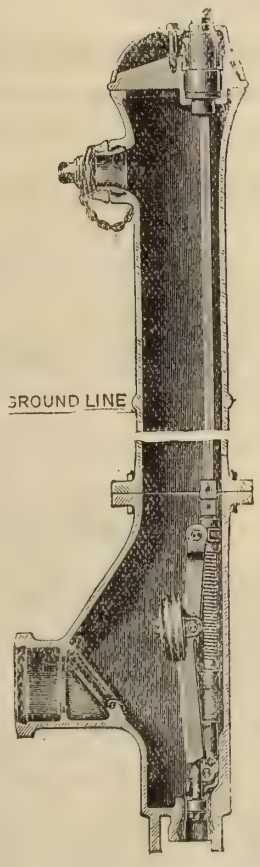

WATERWORKS SUPPLIES
HYDRANTS — VALVES
PIPE FITTINGS
STEAM PUMPS
PUMPING MACHINERY
Specification Respectfully Solicited.

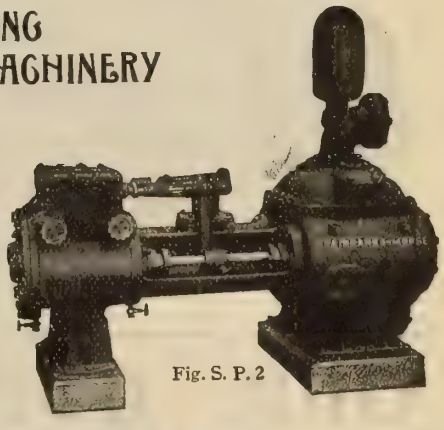

Fig. S. P. 2

The **Canadian Fairbanks Co.,** Limited
MONTREAL TORONTO WINNIPEG VANCOUVER

"RAVEN" PORTLAND CEMENT
— Unexcelled for Strength and Uniformity —
RAVEN LAKE PORTLAND CEMENT CO.
Limited
Long Distance Telephone: RAVEN LAKE, ONT. Telegraph and Post Office Address: VICTORIAROAD, ONT

NEW BUILDINGS.

The Canadian National Exhibition, Toronto, boasts $150,000 worth of new buildings this year, the principal of which is a fine new process building, in which a score of industries will be seen at work.

SIMPSON & LEWIS
Civil Engineers
Electric, Hydraulic Plants, Waterworks, Sewerage, Bridges.
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THE UNITED STATES FIDELITY AND GUARANTY Co.
WE WILL BOND YOU
Acts as Sureties on
Contractors' Bids or Tenders and on Final Bonds
Rates Reasonable. See our Agent in your town or write direct to us
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A. E. KIRKPATRICK, MANAGER

The British Columbia General Contract Company, Limited
Telegraphic Address: "Dredging
Fairfield Building, VANCOUVER, B. C.
ENGINEERS and CONTRACTORS
Municipal Works and Buildings
Bridges
Concrete Construction
Harbor Works
Railways
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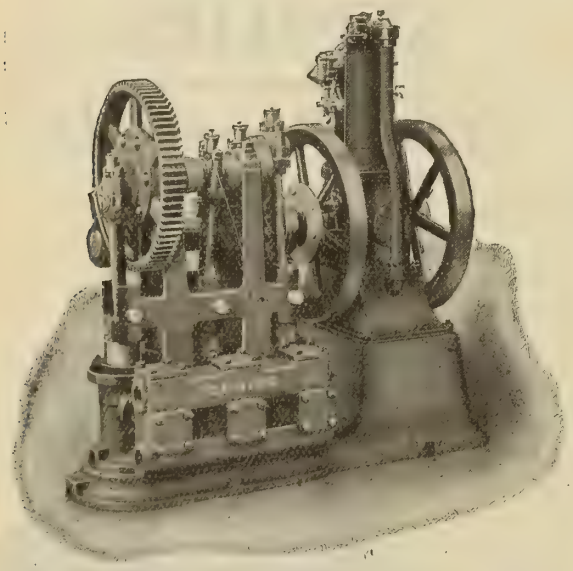

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TRIPLEX POWER PUMPS . . . .
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SINGLE CYLINDER STEAM PUMPS
For every service
Our 110 page Catalogue "G" containing a great deal of valuable information will be mailed on application
DARLING BROTHERS, LIMITED
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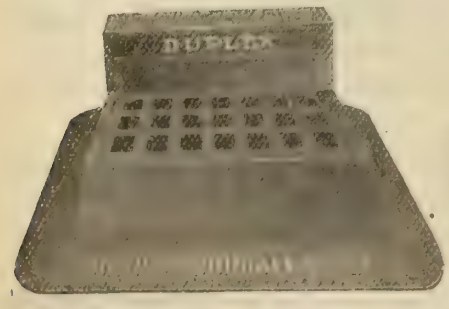
OUR DUPLEX CATCH BASIN



has been recommended by eminent Engineers as the
MOST CONVENIENT FOR GUTTER WORK
Can be adjusted to different heights and is easily placed.

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Head Office and Works,
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CAST IRON PIPE FOR WATER OR GAS

Special Castings,
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Stand Pipes, Valve Boxes, Drinking and Ornamental Fountains.

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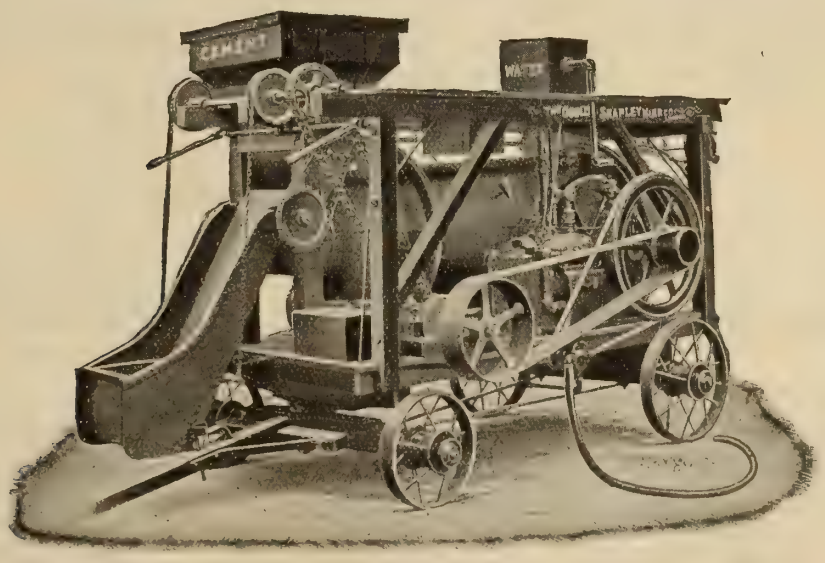
Ideal Automatic Concrete Mixers

The Only Successful Automatic Mixer Made



We also manufacture **Windmills, Tanks and Towers**
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It is Better
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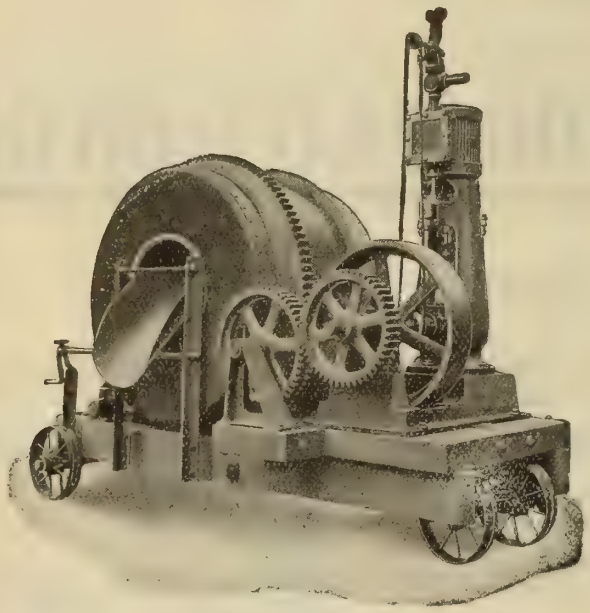
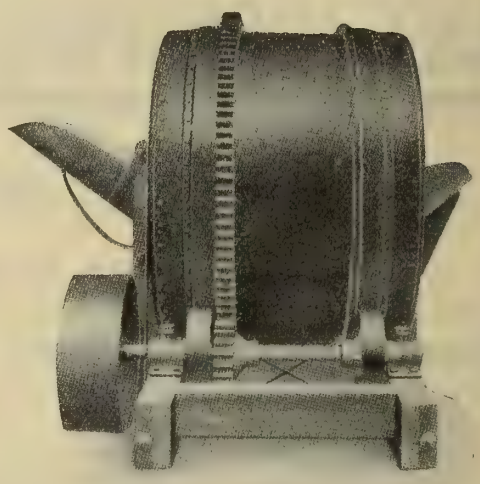


Note Heavy Gears.



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Than to wish you had

We are offering without any manner of doubt, the very best and most up-to-date Concrete or Mortar Mixer on the market to-day. A machine that is distinctly different from all others. It is the simplest machine that can be constructed to do the necessary work. It will mix mortar and concrete with equal efficiency.
They mix speedily at low cost as you save the labor of two men, as material only has to be handled once.

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Simple in Construction—Efficient—Easy to Operate

Saves time—labor—money
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All Capacities—With or Without Power—on Trucks or Skid

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CANADIAN

Contract Record

A Weekly Journal of Public Works, Tenders, Advance Information and Municipal Progress

This Paper Reaches Every Week the Town and City Clerks, Town and City Engineers, County Clerks and County Engineers, Purchasers of Municipal Debentures and Leading Contractors In All Lines Throughout Canada

VOL. 17. TORONTO, MONTREAL — AUGUST 8, 1906 — WINNIPEG, VANCOUVER No. 23

THE CANADIAN CONTRACT RECORD
PUBLISHED EVERY WEDNESDAY

As an intermediate Edition of the Canadian Architect and Builder.

THE C. H. MORTIMER PUBLISHING COMPANY
of Toronto, Limited,

Subscription Price, $2 per annum, payable in advance.

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Telephone Main 2362.

Branch Offices:
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720-721 Union Bank Building, Winnipeg. Telephone 1274
Davis Chambers, 615 Hastings St., Vancouver, B.C. Telephone 2248

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The Royal Institute of British Architects, London.

Examination for Admission as Associate.

An examination for admission as Associate of the Royal Institute of British Architects, London, will be held in Toronto, from the 16TH to 23RD of NOVEMBER, 1906.

Full particulars and all information regarding this examination can be had by applying to F. S. BAKER, Honorary Secretary for Canada Mail Building, Toronto.

THE PROVINCE OF SASKATCHEWAN

DEPARTMENT OF PUBLIC WORKS

TENDERS FOR THE SUBSTRUCTURE

Of Traffic Bridge at Battleford

Sealed tenders addressed to "The Deputy Commissioner of Public Works, Regina, Sask." and endorsed "Tenders for Battleford Bridge" will be received up to 4.30 p. m., MONDAY, AUGUST 13TH, 1906, for the supply of all material and the construction of eight (8) concrete piers and two (2) abutments for a traffic bridge over the Saskatchewan River at Battleford.

About 5,000 cubic yards of concrete will be required in the work.

A certified cheque for the sum of $4,000 must accompany each tender. The cheque will be retained until the necessary contract and bond are executed and the work commenced.

The cheques of unsuccessful bidders will be returned after the contract is signed.

The right is reserved to reject any or all bids or waive any defects.

Plans, specifications and all information may be obtained on application to the undersigned.

Dated at Regina, Sask., June 29, 1906.

F. J. ROBINSON,
Deputy Commissioner of Public Works

FOR SALE CHEAP

About 75,000 ft. Best quality

SCOTCH SEWER PIPE

Sizes 5" to 18" diameter, ex S/S "HESTIA" on wharf Halifax, N. S. and St. John, N. B. For particulars apply to

HYDE & WEBSTER,
Montreal, Que.

Tenders for Supply of Turbine Pumps.

Sealed tenders addressed to Ald. J. C. Gibson, chairman Fire, Water and Light Committee, for supply of two turbine pumps with electric motors for the city waterworks, will be received at the office of the undersigned up to 2.30 p. m. on

MONDAY, AUGUST 27, 1906.

Specifications and forms of tender may be obtained at the office of Col. H. N. Ruttan, City Engineer, Winnipeg, Manitoba.

Each tender must be accompanied by an accepted cheque or draft payable to the order of the city treasurer, or cash deposit for the sum called for in the form of tender supplied, which will be subject to forfeiture in case of failure on the part of the contractor to enter into a written contract with approved sureties if called upon to do so.

The city reserves the right to reject any or all tenders, or to accept any bid which appears advantageous to the City of Winnipeg.

C. J. BROWN,
City Clerk's Office, City Clerk.
Winnipeg, July 18, 1906.

TOWN OF FORT FRANCES

PROVINCE OF ONTARIO

TENDERS FOR

WATERWORKS AND SEWERAGE

Contract "A" All labor necessary for constructing the Waterworks Distributing system and certain materials therefor.
Contract "B" All labor for constructing Sewerage System and certain materials therefor.
Contract "C" The supply and erection of an Elevated Steel Storage Tank.
Contract "D" Supplying Cast Iron Pipes and Special Castings.
Contract E", Supplying Gate Valves and Fire Hydrants.
Contract "F" Supplying Vitrified Tile Pipes.
Contract "G" Suplying Cast Iron Manhole Covers, Catch-Basin Covers, etc.

Sealed tenders will be received by the Town Clerk, until 8 p. m. on WEDNESDAY, AUGUST 15TH, 1906.

Plans and specifications may be seen and forms of tenders obtained at the office of the Town Clerk or at the head offiee of the Chief Engineer.

J.C. BARR, Esq., Mayor. W. H. ELLIOTT, Esq., Town Clerk.
JOHN GALT, C.E. & M.E., Chief Engineer, Toronto, Ont.

Tenders for Dam

Sealed tenders will be received by the undersigned up to noon, AUGUST 15TH, 1906, at their office, 123 Bay street, Toronto, for the construction of a Dam and Abutments at Eugenia Falls, Grey County, Ontario; the general dimensions being, length of Dam 80 feet, height 40 feet. Plans and specifications may be seen at the above address between the hours of 10 a.m. and 5 p.m. daily. (Saturdays 10 a.m. to 1 p.m.)

The right is reserved to reject any or all tenders.

GEORGIAN BAY POWER CO. Limited,
Thos. McLaughlin, Secretary-Treasurer.
Toronto, August 1st, 1906.

TOWN OF STEELTON
Province of Ontario

Tenders for Waterworks

Sealed tenders addressed to the Town Clerk will be received until 8 p.m. on

TUESDAY, AUGUST 21ST, 1906

for the following works:

Contract "A" Trenching and Pipelaying, 27,000 feet.
" "C" Water Tower or Stand Pipe.
" "D" Cast Iron Pipes and Specials, about 600 tons.
" "E" Fire Hydrants, Valves, etc.

Tenders for pumping station, machinery, etc., will be called for at a later date.

Plans and specifications may be seen at the Town Hall, Steelton, or at the office of the Chief Engineer, Toronto.

J. F. SHAW, Esq., Mayor. J. ROBINSON, Esq., Town Clerk.
WILLIS CHIPMAN, C.E.
103 Bay Street,
Toronto, Ont.

$34,000.00

TOWN OF CARMAN

Debentures for Sale

Sealed tenders addressed to the Secretary-Treasurer of the Town of Carman and marked "Tender for Waterworks and Sewer Debentures" will be received up to 8 o'clock p.m. on SATURDAY, THE 25TH DAY OF AUGUST, 1906, for the purchase of Debentures of the Town of Carman amounting to Thirty-Four Thousand Dollars ($34,000.00) with payments distributed over a period of twenty years from the Thirtieth Day of June, A.D., 1906, with interest at the rate of five (5) per cent. per annum

Principal and interest payable at the Canadian Bank of Commerce, Carman, and the debentures such that the total amount of principal and interest will be as nearly equal as may be in each year.

The highest or any tender not necessarily accepted.

Any information desired may be obtained by addressing the Secretary-Treasurer.

A. MALCOLMSON,
Secretary-Treasurer of the Town of Carman.
Dated at Carman, Man., July 18th, 190 .

[FOR ADDITIONAL ADVERTISEMENTS FOR TENDERS SEE NEXT PAGE.]

TENDERS
PICTON LIBRARY

Separate and bulk tenders will be received up to noon, AUGUST 16, 1906, for various trades including all works required to erect and complete a Public Library Building at Picton, Ontario.

Plans and specifications may be seen on application.

Lowest or any tender not necessarily accepted.

J. ROLAND BROWN, Solicitor,
Chairman of Building Committee,
Picton, Ontario.

$24,000.00
TOWN OF CARMAN
Debentures for Sale

Sealed tenders addressed to the Secretary-Treasurer of the Town of Carman and marked "Tender for Electric Light and Power Debentures" will be received up to 8 o'clock p.m. on SATURDAY, THE 25TH DAY OF AUGUST, 1906, for the purchase of Debentures of the Town of Carman amounting to Twenty-Four Thousand Dollars [$24,000.00] with payments distributed over a period of Thirty Years from the Thirtieth Day of June, A. D., 1906, with interest at the rate of five [5] per centum per annum.

Principal and interest payable at the Canadian Bank of Commerce at Carman, and the debentures such that the total amount of principal and interest will be as nearly equal as may be in each year.

The highest or any tender not necessarily accepted.

Any information desired may be obtained by addressing the Secretary-Treasurer.

A. MALCOLMSON,
Secretary-Treasurer of the Town.

Dated at Carman, Man., July 18th, 1906.

DEBENTURES FOR SALE

Sealed tenders will be received by the undersigned up to SATURDAY, THE 25TH DAY OF AUGUST NEXT, for the purchase of the following Debentures of the Town of Petrolia.

$6 143.18 Local Improvement Debentures dated 1st August, 1905, bearing interest at 4 per cent. and repayable in 20 annual payments of $452.03, principal and interest, payable on the 31st day of December each year; $4,055 88 Local Improvement Debentures, dated 1st August, 1906, bearing interest at 4½ per cent. and repayable in 20 annual payments of $309 49 principal and interest, payable on the 31st day of December each year. The foregoing have been legalized by Special Act of the Legislature.

$17,000.00 School Debentures dated 1st August 1906, bearing interest at 4½ per cent. repayable in 30 annual payments of $1,043.65, principal and interest, payable on the 31st day of December each year.

The highest or any tender not necessarily accepted.

For further particulars apply to the undersigned.

JOHN McHATTIE,
Town Clerk

To Bridge Builders

Sealed tenders marked "Tenders for Priceville Bridge," addressed to John McArthur, County Councillor, Priceville, will be received up to two o'clock p.m. on FRIDAY, 24TH AUGUST, INSTANT, for the erection of a Steel Bridge over the Saugeen River, on the town line between Artemesia and Glenelg townships, according to plans and specifications prepared by I. Traynor, engineer, and which may be examined at the store of John McArthur in the said village of Priceville. The work to be completed inside of 30 days from the time of letting of the contract.

Tenders may be put in for the work complete, or for Concrete Abutments, for Steel Work and Flooring, for Filling Embankment and removing of old bridge.

Each tender must be accompanied by a certified bank cheque for the sum of 5 per cent. of the total contract price, payable to the Treasurer of the County of Grey, which shall be forfeited to the county in case the party tendering shall fail to enter into the contract at the price stipulated in tender, when called upon to do so, or to furnish satisfactory security for the due fulfilment of said contract.

The lowest or any tender not necessarily accepted.

JOHN McARTHUR.
County Councillor.

Priceville, August 2, 1906.

WANTED

A first-class architectural designing draughtsman to take charge of an office. Salary $2,500 per year. Apply to Architect, care CONTRACT RECORD, Toronto.

WANTED

Information regarding good farm for sale with good title somewheres near Toronto. Give price and description and character of soil. Also state when possession can be had. Owners only need answer. State how far from town, and mention improvements. Address

W. C. CUNNINGHAM,
Andrus Bldg., Minneapolis, Minn.

Tenders for Supply of
Water, Pipe, Specials, Hydrants and Gates

Separate sealed tenders addressed to Ald. J. C. Gibson, Chairman of the Fire, Water and Light Committee, for the supply of a quantity of Water Pipe, Specials, Hydrants and Gates for the City Water Works, will be received at the office of the undersigned up to 2.30 p.m. on

MONDAY, AUGUST 27, 1906

Specifications and forms of tender may be obtained at the office of H. N. Ruttan, City Engineer, Winnipeg, Man.

Each separate tender must be accompanied by an accepted cheque or draft payable to the order of the City Treasurer, or cash deposit for the sum called for in the form of tender supplied, which will be subject to forfeiture in case of failure on the part of the contractor to enter into a written contract with approved sureties if called upon to do so.

The city reserves the right to reject any or all tenders or to accept any bid which appears advantageous to the City of Winnipeg.

C. J. BROWN,
City Clerk.

City Clerk's Office, Winnipeg, August 1, 1906.

CONTRACTS OPEN.

KENTON, MAN.—W. Leslie is considering the erection of a new house.

PARIS, ONT.—Pickering Bros. will soon begin the erection of a new residence.

GRANBY, QUE.—A by-law has been carried to provide for the waterworks system.

HEWARD, SASK.—Munroe & Co. have decided to erect a new business block.

MANOR, SASK.—The erection of the new Northern Bank will soon begin, cost $12,000.

LEAMINGTON, ONT.—Dr. Hillier purposes erecting a large building on Talbot street.

STELLARTON, N.S.—The C.P.R. will soon begin erection of an addition to their roundhouse.

ABERDEEN, N.S.—It is said that Donald Fraser & Sons will rebuild the mill on the old site.

ST. JOHN, N.B.—The congregation of St. Phillip's church are preparing to build a new parsonage.

WOODSTOCK, N.B.—J. H. Thompson has bought a site on which he intends erecting a residence.

NEWMARKET, ONT.—It has been practically decided that the new Friends' College will be built here.

PEMBROKE, ONT.—The Colonial Lumber Company will erect a number of houses for their employees.

ALMONTE, ONT.—Preparations are being made for erection of a new building for the Bank of Montreal.

NORTH BAY, ONT.— A site has been chosen in the centre of the town for the Normal school building.

BERLIN, ONT.—The Station Hotel here it is expected will be replaced by a new four-story brick building.

KAMLOOPS, B.C.—The Provincial Anti-Tuberculosis Society are looking for site for their new sanitarium.

NEW WESTMINSTER, B. C. — The Hospital Board are looking for a site for the new hospital building.

ST. CATHARINES, ONT. — The City Council have granted $5,000 for improvements in the Public schools.

ARCOLA, SASK.—On August 20th a by-law will be voted on to raise $40,000 for installing waterworks system.

VIRDEN, MAN. — James Huiton, late of the Balmoral Hotel, will erect a new building near the C.P.R. station.

SYDNEY, N. S.—St. James Presbyterian church recently burned, will be rebuilt. Rev. J. A. McDonald, pastor.

GUELPH, ONT. — W. Mahoney, architect, will erect a new residence corner of Yarmouth and Woolwich streets.

WOODSTOCK, ONT.—A manufacturing concern is negotiating with the City Council concerning their location there.

YORKTON, SASK.—C. J. McFarlane will receive tenders up to August 10th for the purchase of $5,000 school debentures.

HULL, QUE.—Some Ottawa capitalists propose establishing a factory here for the manufacture of ladies' garments.

WALLACEBURG, ONT. — The plans for the new Carnegie library have been accepted and building will soon begin.

CANNINGTON, ONT.—Neil Clarke is preparing to make extensions to his store building, corner Ann and Cameron streets.

SARNIA, ONT.—George Lucas has taken tenders for work in connection with the repairs of the Devine street school.

REGINA, SASK.—The plans for the new Northern Bank building have been prepared, four-story structure, red brick and stone.

BRANDON, MAN.—Blair & Northwood, architects, have taken tenders for alterations and additions to the Northern Bank building.

ORANGEVILLE, ONT.—The C. P. R. have decided to build a large station to replace the one burned. Plans are being prepared.

GRAVENHURST, ONT.—Two by-laws have been carried to spend $48,000 for system of waterworks and $60,000 for the power plant.

YARMOUTH CENTRE, ONT. — The school house for the newly organized school district will be located two miles south of this place.

LETHBRIDGE, ALTA.—Hon. Dr. DeVeber has purchased site on Burdett street on which it is expected he will erect a fine residence.

SYDNEY, N. S.—H. E. Winter of Ammonial Explosives, Limited, London, England, is considering the erection of a branch business here.

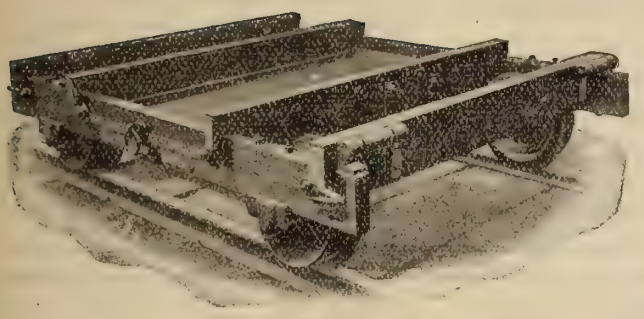
BELLWOOD, ONT.—J. A. Goodall is preparing to build a two-storey cement block building on the site of the store burnt some time ago.

ST. MARY'S, ONT. — On August 27th a by-law will be voted on to raise $40,000 for Western Ontario Railway to connect with the C.P.R.

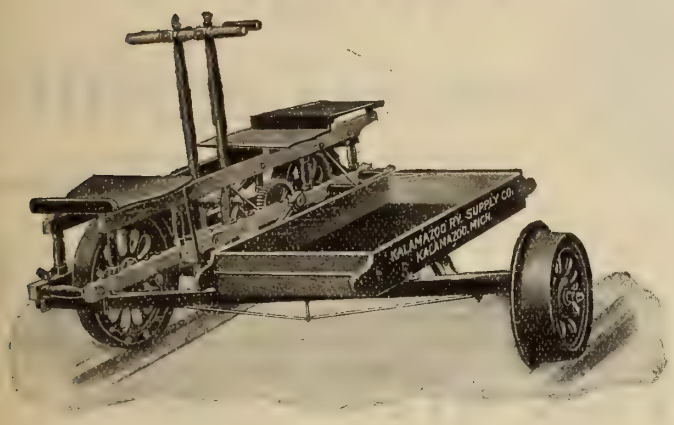
VICTORIA, B.C. — F. M. Rattenbury, architect, has taken tenders for erection of a residence on St. Charles street for J. O. Grahame.

DORCHESTER, N.B.—A new foundry for the manufacture of stoves, etc., is soon to be located here. W. R. Dowd and H. R. Hicks are interested.

NORTH TORONTO, ONT.—W. J. Douglas, Eglinton, is receiving tenders this week for construction of a number of tar, gravel and plank sidewalks.



Railroad Equipment



Locomotives
Dump Cars
Rail Cars
Graders
Dump Wagons
Dump Carts
Hand Cars
Track Tools
Concrete Mixers
Rock Crushers
Track Jacks

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GODERICH, ONT. — The Council gives notice of its intention to construct cement sidewalks on Trafalgar and Cobourg streets and Cambria road.

WETASKIWIN, ALTA.—L. R. Rix will soon begin building a two-story block.—It is expected that the Bank of Commerce will soon begin work on their new building.

CALAIS, N.B.—It is expected that the erection of the new Customs House and Post Office will soon take place.—Haley & Son are considering the erection of a factory here.

DUNCANS, B. C.—F. C. Gamble, Public Works Engineer, Victoria, has taken tenders for the manufacture and delivery of the iron work for the bridge over Cowichan river.

HOLMFIELD, MAN.—Tenders are being called for the erection of a new Anglican church.—Preparations have been made for the erection of a new manse on Weir street.

NIAGARA FALLS, ONT.—G. Badger and Gay Bros. have purchased the property on Queen street between the Blount and Badger stores on which each will erect a business block.

HAWKSHAW, N. B. — Plans have been prepared and tenders will soon be called for the construction of a steel bridge across the St. John river at this place, estimated cost $60,000.

DELHI, ONT.—Tenders will soon be called for electrical and hydraulic equipments in connection with the new dam being erected here under the supervision of John S. Fielding, C. E., Toronto.

ST. STEPHEN, N.B.—Tenders will be received by the Town Clerk up to August 9th for construction of a brick pumping station. Plans at his office and at office of Daily Telegraph, St. John.

PETERBORO, ONT.—It is understood that the proposed enlargement of the Bank of Commerce building will be commenced at once.—Plans for the new Isolation hospital have been prepared.

BROCKVILLE, ONT. — The Council gives notice of its intention to construct granolithic sidewalks on William, Pine, Water, Ormond and Park streets and sewers in King and James streets.

LONDON, ONT.—The Bank of Toronto have purchased a site, corner Richmond and John streets, where a new office will be built.—It is reported that a large apartment house will be erected here.

STRATHCONA, ALTA.—A. J. McLean, Town Engineer, has taken tenders for construction of foundations for engineers and generators in the power house also for construction of concrete sidewalks.

VAGREVILLE, ALTA. — F. A. Morrison will receive tenders up to August 20th for the purchase of $15,000 five per cent. school debentures.—W. Parker intends erecting a flour mill here this season.

MOOSE JAW, SASK.—Jones & Bunyard, architects, have taken tenders for a solid brick residence on Langdon Crescent for H. Ferguson.—It is reported that the C.P.R. will build a hotel here cost $150,000.

INGERSOLL, ONT.—Tenders will be received up to August 10th for the erection of a stone and brick factory building for the Waterhouse Manufacturing Co. Plans at office of Ingersoll Woolen Mills and with B. McNichol, architect, Woodstock.

MONTREAL, QUE.—The directors of the G.T.P.R. are considering plans for a large station to replace the present Bonaventure station.—John R. Barlow has taken tenders for construction of sewer in the parish of St. Laurent.—The new building for the Canadian Bank of Commerce will occupy the entire site of the present Temple building on St. James street.

CHARLO'S COVE, N.S.—F. Gelinas, Department of Public Works, Ottawa, will receive tenders up to August 24th for the construction of a breakwater. Plans at the Department, with the Postmaster here and at the offices of C. E. W. Dodwell, Halifax, and E. G. Millidge, Antigonish.

CALGARY, ALTA.—The Bell Telephone Company intend erecting a new exchange building.—The G.T.P.R. are planning three roads from Calgary one to Battleford and one to Lloydminster and one to Coutts.—The National Drug Company have purchased a site, corner Third street and Seventh avenue for a large wholesale building.—The Ashdown Hardware Company, of Winnipeg, have decided to build a large warehouse here.

HOLLAND LANDING, ONT.—L. K. Jones, Department of Railways and Canals, Ottawa, will receive tenders up to August 24th for the building of the substructure of the swing bridge on the Holland river section of the Trent canal at the crossing of side road to Queensville. Plans at the Department, with the Superintending Engineer, Peterboro, and with A. T. Kerr, this place.

PORT ARTHUR, ONT.—The Pigeon Lumber Co. have secured limits along the Hudson Bay branch of the C.N.R. and will erect a saw mill.—C. W. Wheeler, architect, has taken tenders for a dwelling corner of Pearl and Secord streets for D. K. Campbell.—T. Hanley, architect, has taken tenders for alterations and additions to St. Paul's Presbyterian church also for alterations in D. J. Moore's shop.

QUEBEC, QUE.—A site has been secured and plans prepared for the new buildings for the Frontenac Gas Company.—Building permits have been issued as follows: M. Gingras, repairs to building, St. Claire and Oliver streets, cost, $1,000; A. Fostin, repairs to building, Des Fosses street, cost $1,500; F. Boulanger, brick building, Little Champlain street, cost $4,000; Mdme. F. Langelier, repairs to building, O'Connell street.

VANCOUVER, B.C.—Parr & Fee, architects, have prepared plans for additional stories to be added to Mayor Buscombe's premises on Hastings street.—A new building will be erected for the Royal Bank on the present site of the

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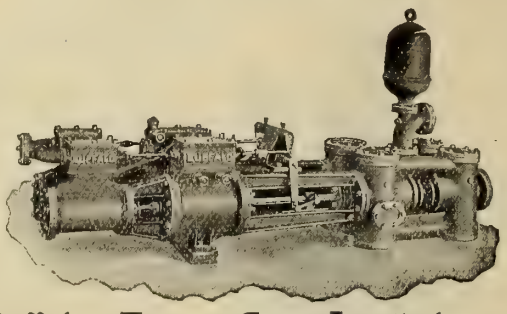

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Argyle house, cost $50,000.—The Merrill Finance Co. will erect a large apartment house, corner Haro and Thurlow streets.—Building permits have been issued as follows: Vancouver Shanghai Co., building, cost $20,000; Mr. Fraser, factory on Seventh avenue; J. Bennett, residence, Seventh avenue, cost $1,500; Mrs. A. McLeod, residence, Prior street, cost $1,600.

OTTAWA, ONT.—The Minister of Public Works proposes to ask Canadian architects to submit competitive plans for the new departmental building on Sussex street.—The T. Lindsay Co. have purchased the property on which their store is located and will soon have the building enlarged.—The Public Works Department have plans prepared for a new stone front to Government House for which tenders will soon be called.

HAMILTON, ONT.—The Stanley Mills Co. intend adding two stories to their store.—The officials of the International Harvester Co. are considering the erection of a large club house near the shore.—The Germania Club have bought the Trade and Labor Hall on East Main street and will erect club quarters there. — The congregation of Central Presbyterian church have selected a site, corner Hannah and Caroline streets, for their new church.

WINNIPEG, MAN. — F. Gelinas, Department of Public Works, Ottawa, will receive tenders up to September 10th for the construction of a concrete lock and dam at St. Andrew's Rapids, Red river. Plans at the Department; at the office of the Resident Engineer of Public Works, Ashdown building; with J. G. Sing, Confederation Life building, Toronto; C. Desjardines, Post Office building, Montreal and P. Beland, Post Office building, Quebec.—Waugh & Beattie, real estate dealers, have sold a site near the C. P. R. shop on which a wire fence factory will be established.—F.R. Evans, architect, has taken tenders for alterations and additions to the Manitoba Clothing store, Main street.—J. H. G. Russell, architect, has taken tenders for several trades required in the erection of a brick store and apartment building on Ellice avenue for J. J. Vopni.—The Martin, Bole, Wynne Co. have decided to build a five-story block, corner McDermott avenue and King street.—H. N. Ruttan, City Engineer, has prepared estimates for the new Elmwood bridge over the Red river, cost $175,000.—Plans are being prepared for the Men's Own building, cost $30,000.

EDMONTON, ALTA.—E.J. Adams, architect of penitentiaries, will prepare plans in connection with the proposed enlargement of the prison here.—P. G. Keyes will receive tenders up to August 27th for construction of wire fence, 16 miles, around the Elk park.—Building permits have been issued as follows: A. McDonald Co. and Telfer Bros., warehouse, Third street, cost $32,000; Edmonton club house, cost $19,500; H. A. Magoon, architect, residence, Eighth street, cost $6,500; H. W. B. Douglas, dwelling, Sixteenth street, cost $4,500; A. Thorgrimson, dwelling, Syndicate street, cost $1,700; W. H. McCray, dwelling, St. Catherine street, cost $1,000; F. M. Faulkenberg, dwelling, Namayo street, cost $1,600; Donald Ross hotel, First street, cost $5,000 H. W. B. Douglas, dwelling, Sixteenth street, cost $4,500; A. H. Magoon, dwelling, Eighth street, cost $6,500; Nina Hamilton, dwelling, Thirteenth street, cost $2,000; N. McFarlane, dwelling, Heiminck street, cost $2,000; Arthur Caton, dwelling, Picard street, cost $5,000; N. Gemreaux, dwelling, Syndicate street, cost $2,400.—A site corner of May and McDougall streets has been purchased for the new Court House.

TORONTO, ONT.—Gourlay, Winter & Leaming have purchased a site between Logan and Carlow avenues on which they will erect a factory.—The Board of Trustees of Toronto General Hospital, have decided against competition among architects for plans for a new building.—The Building Committee of St. John's Presbyterian church, will have new plans prepared for their building corner of Broadview and Simpson avenues.—J. Cohen will erect a four-story hotel on Queen street opposite Teraulay street, cost $26,000.—Tenders are invited at 7 Churchill avenue for erection of a brick house.—H. H. Williams & Co., real estate dealers, have sold the property, north-east corner Wellington and Simcoe

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streets to a wholesale firm for a large warehouse.—The property 83-7 Bay street has recently been sold by S. G. Beatty which it is said will form part of the site for a large C.P.R. hotel building. —C. Cummings, formerly of San Francisco, has purchased the Slater shoe store, 117 Yonge street, which he intends having extensively remodelled.— —Plans are being prepared for the new building on Devonshire Place for the Dominion Observatory and Weather Bureau.—The City Engineer and Park Commissioner will report on a project to fill in the lagoon beside the athletic park at Centre Island.—The new brick building of the Austrian Jewish Synagogue on Teraulay street will be erected at a cost of $18,000.—John Northway Co. have purchased the property 248 and 250 Yonge street on which it is understood important improvements will be made.— J. A. Coulter Co., Court street, have purchased the property 35 to 45 Lombard street on which they will erect new work shops, show rooms, and offices.—It is expected that a new building will be erected in Queen's Park for the Ontario Veterinary College.—Tenders will be received by J. S. A. Whealey up to August 14th for additions and alterations to Gerrard street Methodist church.

CONTRACTS AWARDED.

TORONTO, ONT. — Construction of new rose house at Government House: T. B. Gering, contractor, cost $2,500.

GALT, ONT.—Installing two 60 inch Canadian turbines in the plant of the Gas Light Co.: Charles Barber & Sons, Meaford, contractors.

OTTAWA, ONT.—Supply of concrete for the C. N. R. from this city to Hawkesbury: Dominion Concrete Co., contractors, Kemptville. — Construction of asphalt pavements: Laurier avenue, cost $48,500, Charlotte street, cost $23,433; Barber Asphalt Co., contractors.

WINNIPEG, MAN.—A. B. Ormsby, Winnipeg and Toronto, have secured contracts for the sheet metal, fireproof window and roofing work on the following buildings: A. C. Hample building, warehouse for the Imperial Plumbing and Building Co., Canada Malting Co.'s new elevator, Chaffey and Vorheeven, Canada Paint Co.

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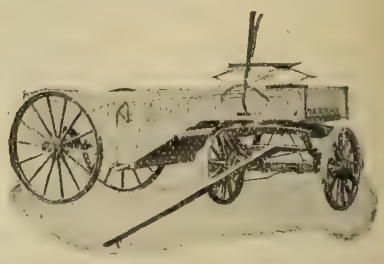

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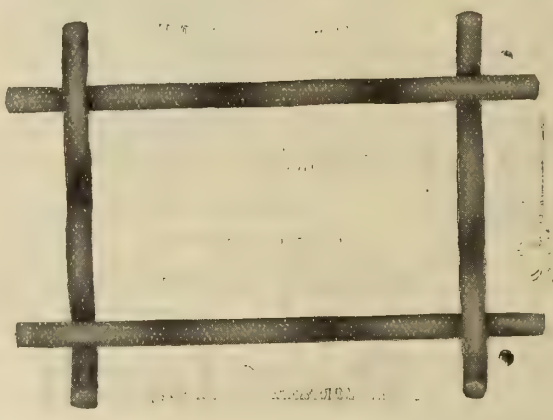

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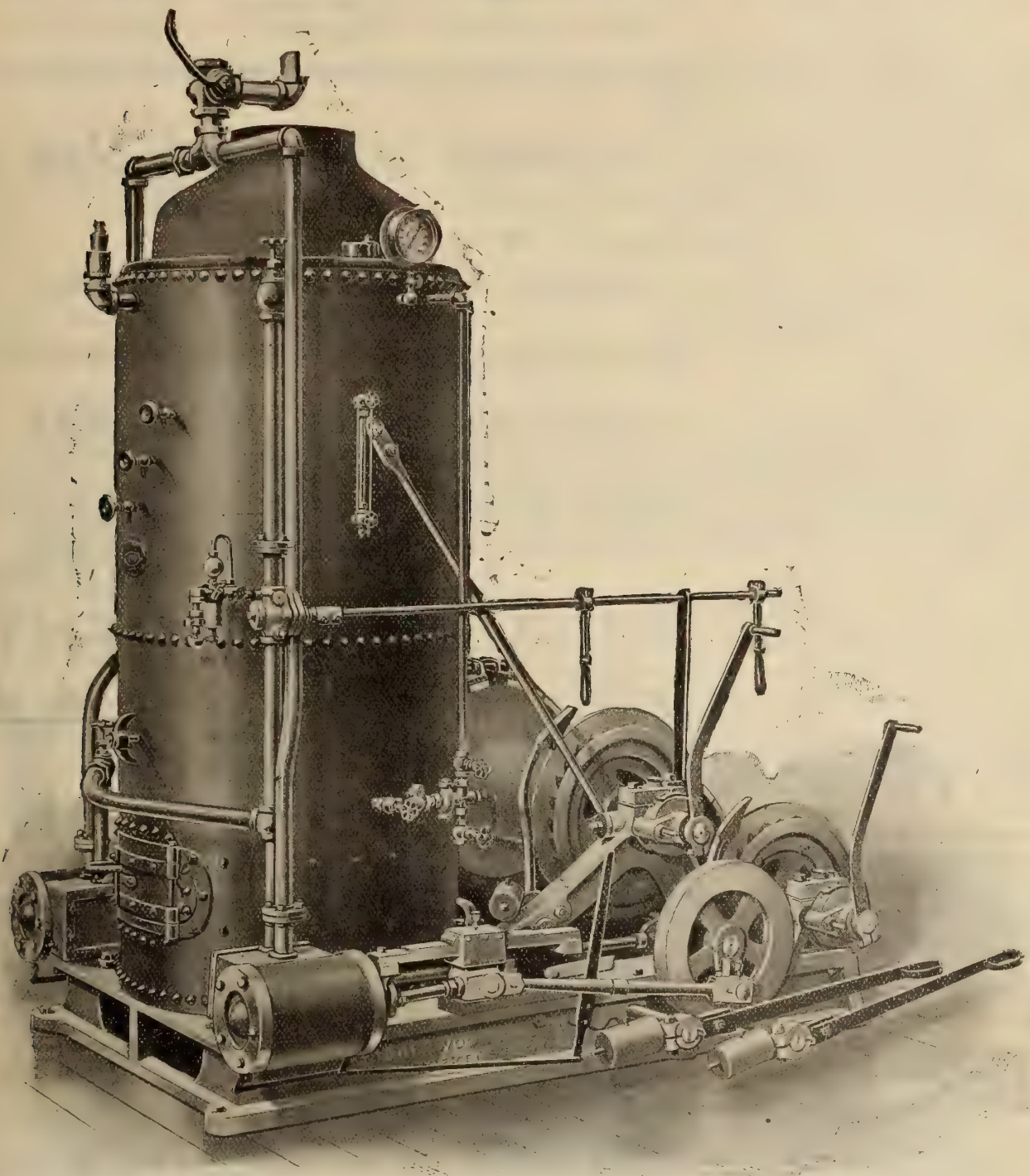

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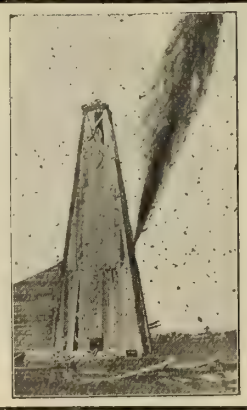

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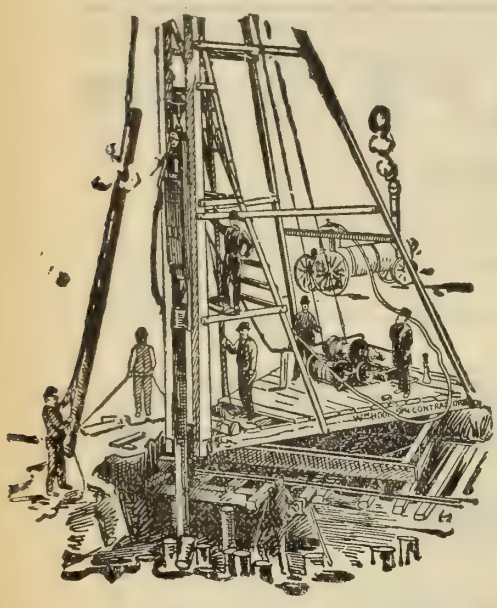

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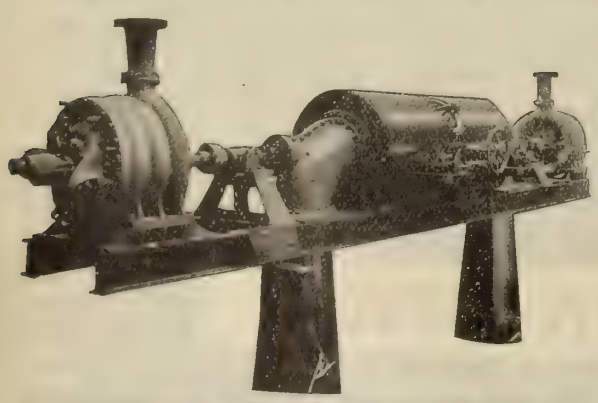

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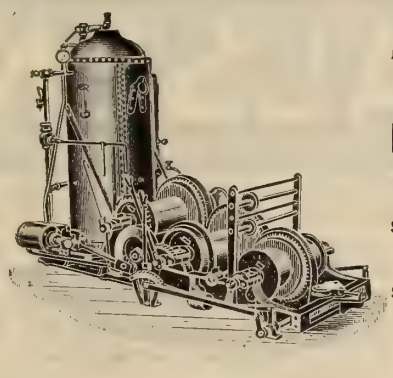

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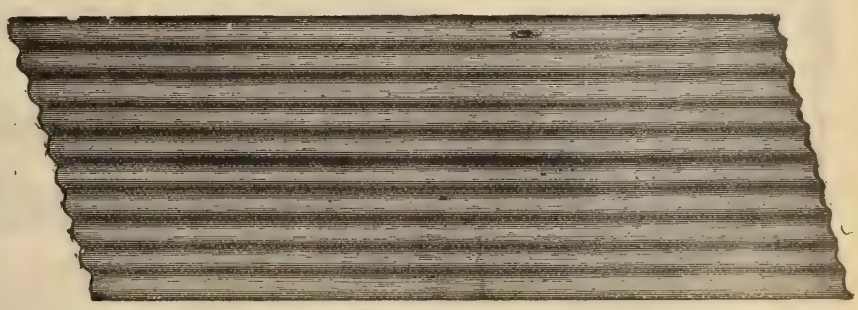

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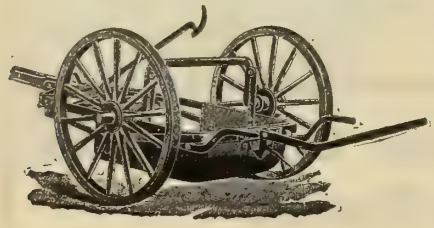

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							Neat.					3 (Sand) to 1 (Cement)				
					Initial	Final	1 dy.	7 dys	28 dys.	3 mos	1 yr.	1 dy.	7 dys	28 dys.	3 mos	1 yr.
1903	20	O.K.	3.135	2.1	162	345	307	701	783	827	*	74	214	299	367	*
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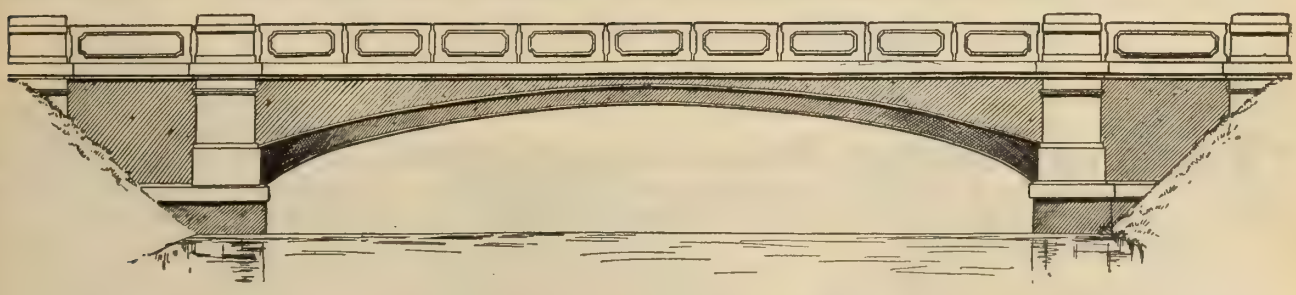

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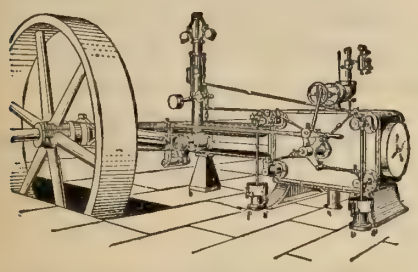

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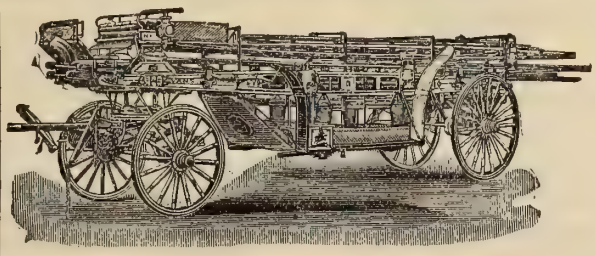

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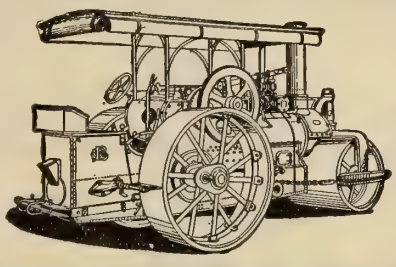

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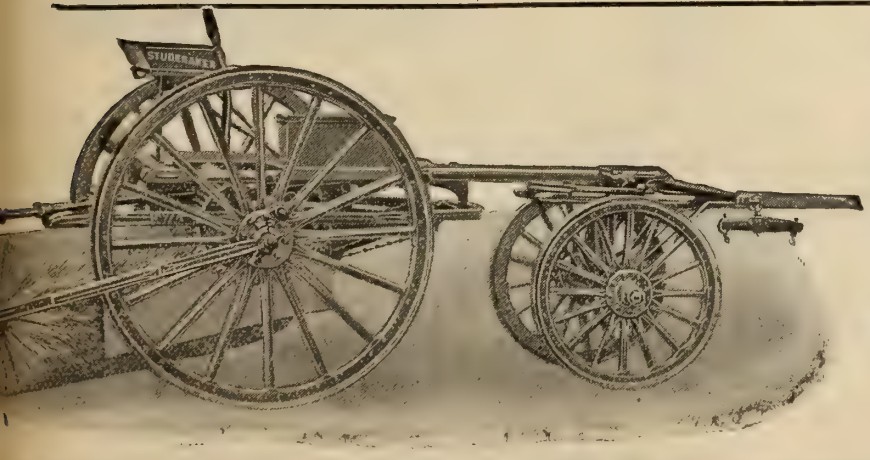

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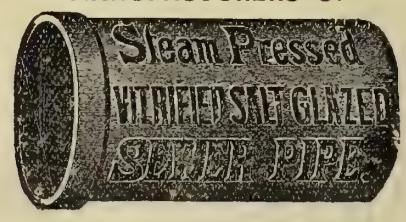

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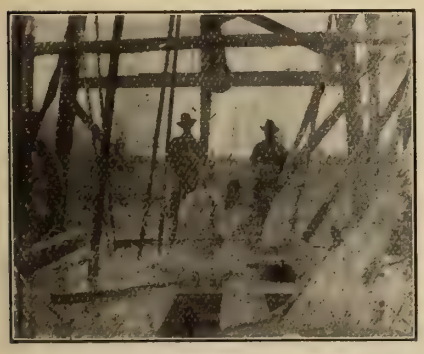

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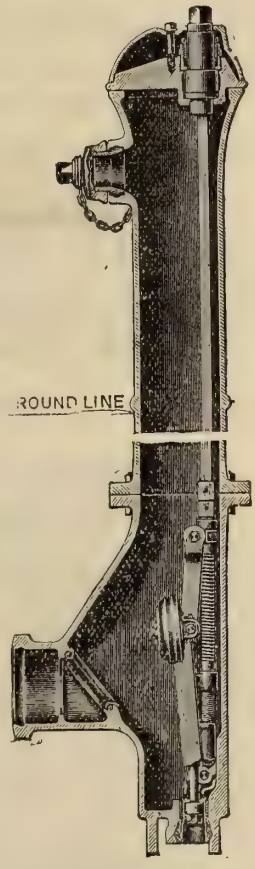
BORAX,
CHINA CLAY.



WATERWORKS SUPPLIES

HYDRANTS — VALVES
PIPE FITTINGS
STEAM PUMPS

PUMPING MACHINERY

Specification Respectfully Solicited.

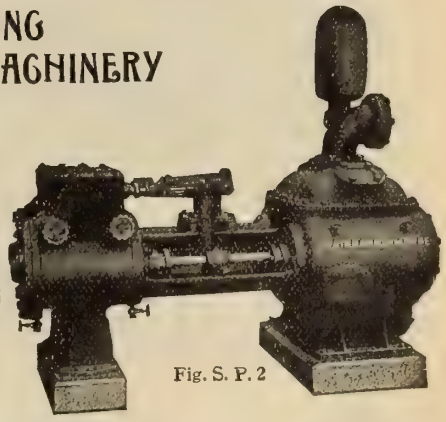


Fig. S. P. 2

The **Canadian Fairbanks Co.,** Limited
MONTREAL TORONTO WINNIPEG VANCOUVER

"RAVEN" PORTLAND CEMENT
— Unexcelled for Strength and Uniformity —
RAVEN LAKE PORTLAND CEMENT CO.
Limited
Long Distance Telephone: RAVEN LAKE, ONT. Telegraph and Post Office Address: VICTORIA ROAD, ONT

T. Viau & Co. is the name under which Mrs. Thadee Viau, mason contractor, has registered the business.

A new brick yard is being opened in Estevan, Sask., by Nicholson & Beckel. They expect to have brick on the market shortly.

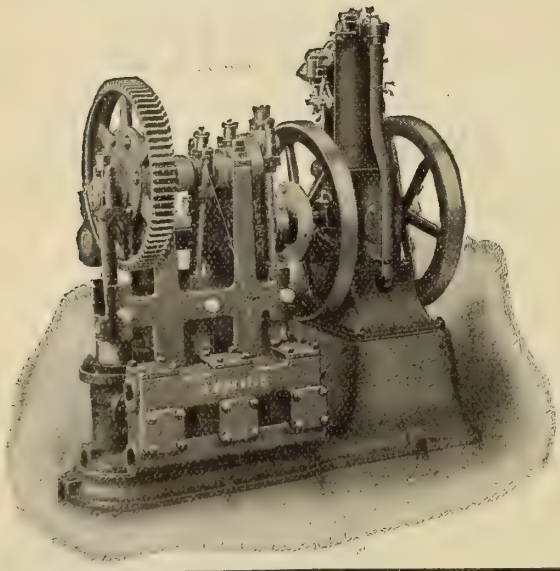
SIMPSON & LEWIS
Civil Engineers
Electric, Hydraulic Plants, Waterworks, Sewerage, Bridges.
33 Bank St. Chambers, OTTAWA.

Advertisements in the CONTRACT RECORD bring results

The **British Columbia General Contract Company,** Limited
Telegraphic Address: "Dredging
Fairfield Building, VANCOUVER, B. C.

ENGINEERS and CONTRACTORS

Municipal Works and Buildings
Bridges
Concrete Construction
Harbor Works
Railways
Dredging and Reclamation



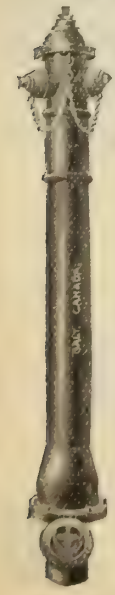
We manufacture and carry in stock

TRIPLEX POWER PUMPS . . . .
DUPLEX STEAM PUMPS . . . .
SINGLE CYLINDER STEAM PUMPS

For every service

Our 110 page Catalogue "G" containing a great deal of valuable information will be mailed on application

DARLING BROTHERS, LIMITED
Branch Offices: TORONTO WINNIPEG
Reliance Works: MONTREAL



THE GALT FIRE HYDRANT

Endorsed as the best Hydrant on the market, easily operated and perfectly safe against damage above ground. Circulars give full information of this and other MUNICIPAL SUPPLIES, CATCH BASINS, MAN-HOLE COVERS and FRAMES, Etc.

The R. McDougall Co., Limited,
Galt, - Canada.

Head Office and Works,

Toronto, Ont.

CAST IRON PIPE FOR WATER OR GAS

Special Castings,

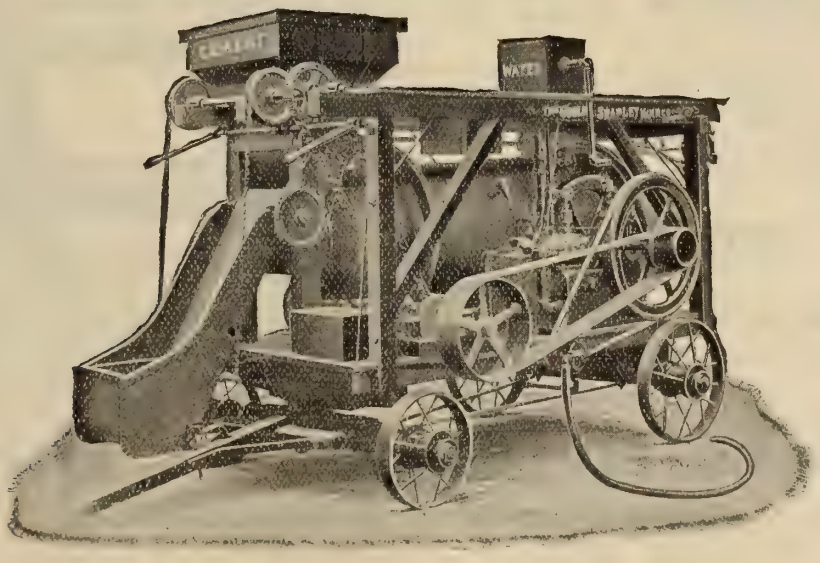
Tees, Crosses, Flanges Pipe, Valves, Hydrants,

Stand Pipes, Valve Boxes, Drinking and Ornamental Fountains.

District Offices: MONTREAL, HALIFAX, OTTAWA, WINNIPEG, VANCOUVER, ROSSLAND

Ideal Automatic Concrete Mixers

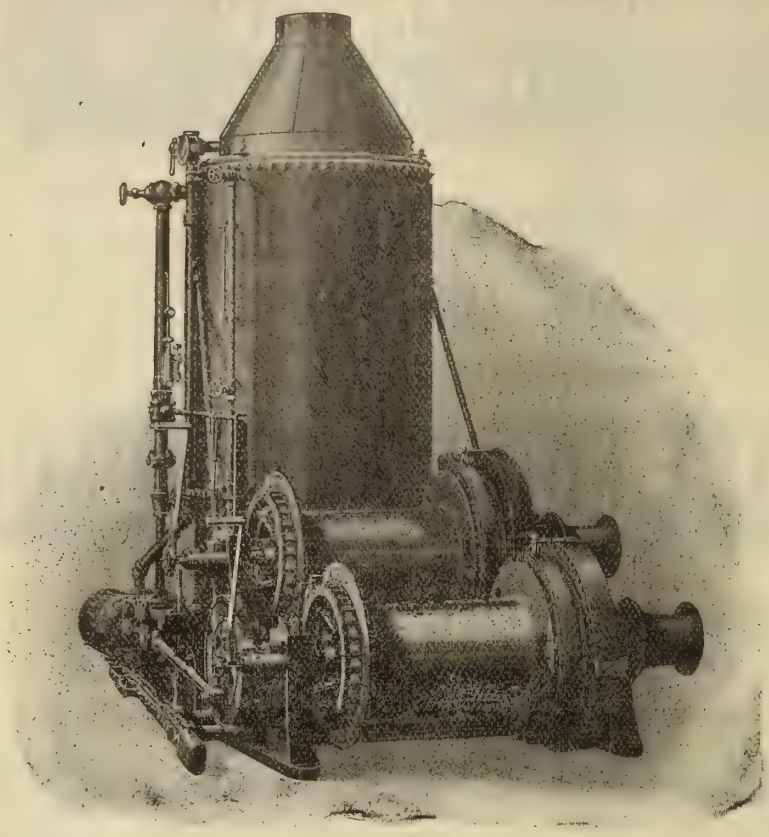
The Only Successful Automatic Mixer Made



We also manufacture **Windmills, Tanks and Towers**
for Waterworks, Fire Protection, Etc.

WE INVITE CORRESPONDENCE

GOOLD, SHAPLEY & MUIR COMPANY, LIMITED
BRANTFORD, CANADA



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For all purposes

Our Hoisting Engines are unexcelled in construction and material and we sell them at the lowest possible prices.

ALL SIZES
IMMEDIATE SHIPMENT

Our Illustrated Catalogue Sent on Request

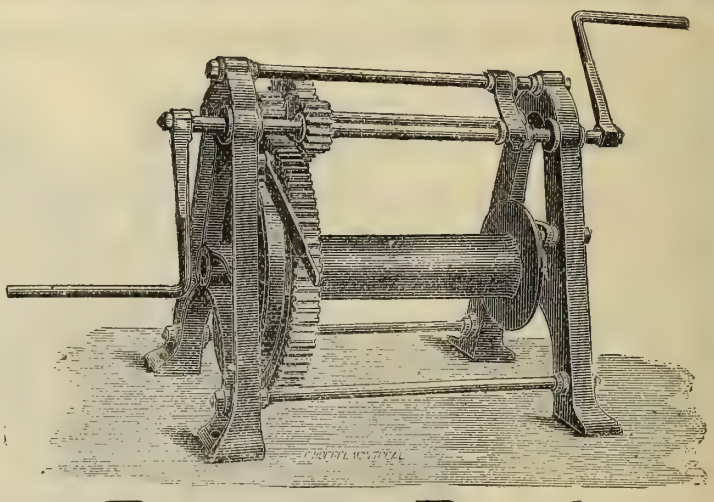
Hoisting Machinery

Winches

We carry a complete stock of Single and Double Purchase Winches in all capacities.

LOW PRICES

If you want a Winch you cannot do better than place your order with us.



Derricks, Horse Powers, Buckets

And all sorts of Hoisting Devices

F. H. Hopkins & Co.

Successors to the Late James Cooper
MONTREAL
Dunn Bros., Winnipeg, Agents

CANADIAN

Contract Record

A Weekly Journal of Public Works, Tenders, Advance Information and Municipal Progress

This Paper Reaches Every Week the Town and City Clerks, Town and City Engineers, County Clerks and County Engineers, Purchasers of Municipal Debentures and Leading Contractors in All Lines Throughout Canada

VOL. 17. TORONTO, MONTREAL — AUGUST 15, 1906 — WINNIPEG, VANCOUVER No. 24

THE CANADIAN CONTRACT RECORD

PUBLISHED EVERY WEDNESDAY

As an intermediate Edition of the Canadian Architect and Builder.

THE C. H. MORTIMER PUBLISHING COMPANY

of Toronto, Limited.

Subscription Price, $2 per annum, payable in advance.

CONFEDERATION LIFE BUILDING, TORONTO
Telephone Main 2362.

Branch Offices:

Room B34, Board of Trade Building, Montreal, Telephone Main 2299.

720-721 Union Bank Building, Winnipeg. Telephone 1274

Davis Chambers, 615 Hastings St., Vancouver, B.C. Telephone 2248

Subscribers who may change their address should give prompt notice of same. In doing so give both old and new address. Notify the publishers of any irregularity in delivery of papers.

The Royal Institute of British Architects, London.

Examination for Admission as Associate.

An examination for admission as Associate of the Royal Institute of British Architects, London, will be held in Toronto, from the 16TH to 23RD of NOVEMBER, 1906.

Full particulars and all information regarding this examination can be had by applying to F. S. BAKER, Honorary Secretary for Canada Mail Building, Toronto.

To Bridge Builders

Sealed tenders marked "Tenders for Priceville Bridge," addressed to John McArthur, County Councillor, Priceville, will be received up to two o'clock p.m. on FRIDAY, 24TH AUGUST, INSTANT, for the erection of a Steel Bridge over the Saugeen River, on the town line between Artemesia and Glenelg townships, according to plans and specifications prepared by I. Traynor, engineer, and which may be examined at the store of John McArthur in the said village of Priceville. The work to be completed inside of 30 days from the time of letting of the contract.

Tenders may be put in for the work complete, or for Concrete Abutments, for Steel Work and Flooring, for Filling Embankment and removing of old bridge.

Each tender must be accompanied by a certified bank cheque for the sum of 5 per cent. of the total contract price, payable to the Treasurer of the County of Grey, which shall be forfeited to the county in case the party tendering shall fail to enter into the contract at the price stipulated in tender, when called upon to do so, or to furnish satisfactory security for the due fulfilment of said contract.

The lowest or any tender not necessarily accepted.

JOHN McARTHUR,
County Councillor.

Priceville, August 2, 1906.

WANTED

Information regarding good farm for sale with good title somewheres near Toronto. Give price and description and character of soil. Also state when possession can be had. Owners only need answer. State how far from town, and mention improvements. Address

W. C. CUNNINGHAM,
Andrus Bldg., Minneapolis, Minn.

DEBENTURES FOR SALE

Sealed tenders will be received by the undersigned up to SATURDAY, THE 25TH DAY OF AUGUST NEXT, for the purchase of the following Debentures of the Town of Petrolia.

$6,143.18 Local Improvement Debentures dated 1st August, 1905, bearing interest at 4 per cent. and repayable in 20 annual payments of $452.03, principal and interest, payable on the 31st day of December each year; $4,055.88 Local Improvement Debentures, dated 1st August, 1906, bearing interest at 4½ per cent. and repayable in 20 annual payments of $309.49 principal and interest, payable on the 31st day of December each year. The foregoing have been legalized by Special Act of the Legislature.

$17,000.00 School Debentures dated 1st August 1906, bearing interest at 4½ per cent. repayable in 30 annual payments of $1,043.65, principal and interest, payable on the 31st day of December each year.

The highest or any tender not necessarily accepted.

For further particulars apply to the undersigned.

JOHN McHATTIE,
Town Clerk

EXTENSION OF TIME

TOWN OF FORT FRANCES

PROVINCE OF ONTARIO

TENDERS FOR

WATERWORKS AND SEWERAGE

Contract "A" All labor necessary for constructing the Waterworks Distributing system and certain materials therefor.

Contract "B" All labor for constructing Sewerage System and certain materials therefor.

Contract "C" The supply and erection of an Elevated Steel Storage Tank.

Contract "D" Supplying Cast Iron Pipes and Special Castings.

Contract E", Supplying Gate Valves and Fire Hydrants.

Contract "F" Supplying Vitrified Tile Pipes.

Contract "G" Supplying Cast Iron Manhole Covers, Catch-Basin Covers, etc.

Sealed tenders will be received by the Town Clerk, until 8 p. m. on THURSDAY, AUGUST 23RD, 1906.

Plans and specifications may be seen and forms of tenders obtained at the office of the Town Clerk or at the head office of the Chief Engineer.

J.C. BARR, Esq., Mayor. W. H. ELLIOTT, Esq., Town Clerk.
JOHN GALT, C.E. & M.E., Chief Engineer,
Toronto, Ont.

Tenders for DAM and POWER HOUSE

Sealed tenders will be received by the undersigned at their office, 123 Bay Street, Toronto, until noon, AUGUST 25TH, 1906, for the construction of a Dam and Power House at Eugenia Falls, Grey County, Ontario. Plans and specifications may be seen at the above address.

The right is reserved to reject any or all tenders.

GEORGIAN BAY POWER CO., LT'D.
THOMAS McLAUGHLIN,
Secretary-Treasurer.

Toronto, August 10th, 1906.

TOWN OF STEELTON

Province of Ontario

Tenders for Waterworks

Sealed tenders addressed to the Town Clerk will be received until 8 p.m. on

TUESDAY, AUGUST 21ST, 1906

for the following works:

Contract "A" Trenching and Pipelaying, 27,000 feet.
" "C" Water Tower or Stand Pipe.
" "D" Cast Iron Pipes and Specials, about 600 tons.
" "E" Fire Hydrants, Valves, etc.

Tenders for pumping station, machinery, etc., will be called for at a later date.

Plans and specifications may be seen at the Town Hall, Steelton, or at the office of the Chief Engineer, Toronto.

J. F. SHAW, Esq., Mayor. J ROBINSON, Esq., Town Clerk.
WILLIS CHIPMAN, C.E.
03 Bay Street,
Toronto, Ont.

$34,000.00

TOWN OF CARMAN

Debentures for Sale

Sealed tenders addressed to the Secretary-Treasurer of the Town of Carman and marked "Tender for Waterworks and Sewer Debentures" will be received up to 8 o'clock p.m. on SATURDAY, THE 25TH DAY OF AUGUST, 1906, for the purchase of Debentures of the Town of Carman amounting to Thirty-Four Thousand Dollars ($34,000.00) with payments distributed over a period of twenty years from the Thirtieth Day of June, A.D., 1906, with interest at the rate of five (5) per cent. per annum

Principal and interest payable at the Canadian Bank of Commerce, Carman, and the debentures such that the total amount of principal and interest will be as nearly equal as may be in each year.

The highest or any tender not necessarily accepted.

Any information desired may be obtained by addressing the Secretary-Treasurer.

A. MALCOLMSON,
Secretary-Treasurer of the Town of Carman.

Dated at Carman, Man., July 18th, 190.

[FOR ADDITIONAL ADVERTISEMENTS FOR TENDERS SEE NEXT PAGE.]

Debentures for Sale

County of Hastings

Sealed tenders will be received by the undersigned up to noon of TUESDAY, 4TH DAY OF SEPTEMBER, 1906, for the purchase of twenty debentures of the County of Hastings aggregating $27,000, drawing 5 per cent. interest One debenture and all interest coupons paid each year amounting to say $1,166.35. First of such payments on sixth day of August, 1907. The highest or any tender not necessarily accepted.

Further information given on application to

B. MALLORY,
Treasurer County of Hastings,
Belleville, Ont.

TENDERS FOR

Cement Concrete Side Walks

Sealed tenders addressed to the Mayor of the town of Hanover will be received up to 6 p. m. of the 20TH OF AUGUST, 1906, for the construction of about 70,000 square feet of Cement Concrete Sidewalks.

An accepted cheque payable to the town treasurer for the sum of 5 per cent. of the contract price must accompany all tenders to be forfeited if the successful tenderer declines the contract and will be returned in case of non acceptance. The plans, specifications, general conditions and form of contract and tender may be seen at the office of the Mayor. The lowest or any tender not necessarily accepted.

W. A. MEARNS, (M.B.).
Mayor

R. McDOWALL,
Engineer.

8th August, 1906.

Tenders for Supply of Turbine Pumps.

Sealed tenders addressed to Ald. J. C. Gibson, chairman Fire, Water and Light Committee, for supply of two turbine pumps with electric motors for the city waterworks, will be received at the office of the undersigned up to 2.30 p. m. on

MONDAY, AUGUST 27, 1906.

Specifications and forms of tender may be obtained at the office of Col. H. N. Ruttan, City Engineer, Winnipeg, Manitoba.

Each tender must be accompanied by an accepted cheque or draft payable to the order of the city treasurer, or cash deposit for the sum called for in the form of tender supplied, which will be subject to forfeiture in case of failure on the part of the contractor to enter into a written contract with approved sureties if called upon to do so.

The city reserves the right to reject any or all tenders, or to accept any bid which appears advantageous to the City of Winnipeg.

C. J. BROWN,
City Clerk.

City Clerk's Office,
Winnipeg, July 18, 1906.

$24,000.00

TOWN OF CARMAN

Debentures for Sale

Sealed tenders addressed to the Secretary Treasurer of the Town of Carman and marked "Tender for Electric Light and Power Debentures" will be received up to 8 o'clock p.m. on SATURDAY, THE 25TH DAY OF AUGUST, 1906, for the purchase of Debentures of the Town of Carman amounting to Twenty-Four Thousand Dollars [$24,000.00] with payments distributed over a period of Thirty Years from the Thirtieth Day of June, A. D., 1906, with interest at the rate of five [5] per centum per annum.

Principal and interest payable at the Canadian Bank of Commerce at Carman, and the debentures such that the total amount of principal and interest will be as nearly equal as may be in each year.

The highest or any tender not necessarily accepted.

Any information desired may be obtained by addressing the Secretary-Treasurer.

A. MALCOLMSON,
Secretary-Treasurer of the Town.

Dated at Carman, Man., July 18th, 1906.

SALE OF DEBENTURES

Sealed bids will be received by the undersigned, the City Treasurer of the City of Fredericton, New Brunswick, at his office in the City of Fredericton, until noon SEPTEMBER 15TH, 1906, for any or all of the following City Debentures issued under authority of the Acts of Assembly of New Brunswick:

$45,000 Fredericton Water Improvement Bonds bearing 4%, payable half yearly on March 15th and September 15th, principal payable $1,000 annually, beginning September 15th, 1911, and balance of $20,000 payable September 15th, 1946.

Also $15,000 Sewerage Bonds at the same rate with accrued interest from July 15th 1906, maturing July 15th, 1946. All above bonds are issued in amounts of $500 each.

The City reserves the right to reject any or all bids or to accept any bid.

I. R. GOLDING,
City Treasurer.

Fredericton, N. B., August 13th, 1906.

TOWN OF MOOSOMIN

Province of Saskatchewan

TENDERS FOR

WATER WORKS

Sealed tenders addressed to the Secretary-Treasurer of the town of Moosomin, Sask., will be received until 7.15 p.m. on

TUESDAY, SEPTEMBER 4TH, 1906,

for the following subdivisions of the proposed works:

Contract "A"—Trenching, Pipelaying, etc., for 6,000 feet of water mains and 2,600 feet of storm sewers.
Contract "B"—Pump House.
Contract "C"—Steel Water Tower.
Contract "D"—Pipes and Specials.
Contract "E"—Valves and Fire Hydrants.
Contract "F"—Sewer Pipes.
Contract "G"—Fire Pump and Gasoline Engines.

Plans and specifications will be ready for inspection and may be seen at the office of the Chief Engineer, 103 Bay street, Toronto, Ont., or at the office of the Secretary-Treasurer, Moosomin, Sask., about August 21st, 1906.

No tender necessarily accepted.

A. WHYTE, Esq., Mayor, Moosomin, Sask.
JOHN SMITHERS, Esq., Secretary-Treasurer, Moosomin, Sask.

WILLIS CHIPMAN, C.E.
Chief Engineer,
103 Bay Street,
Toronto, Ont.

Tenders Wanted

Sealed bids or proposals for construction of a concrete masonry dam and appurtenances in the Town of Amherst, N. S., will be received at the Town Clerk's office until 5 o'clock p.m. AUGUST 27TH, 1906

All bids will be compared upon the Engineer's estimates of quantities of work to be done as follows:

Surface excavation	4,000 cubic yards
Embankment	6,500 " "
Slope paving	100 square "
Rock excavation	600 cubic "
Concrete masonry	3,700 " "
Portland cement in barrels	2,300 bbls.
Portland cement in bags	2,300 bbls.
Gate house superstructure.	
Seeding.	
Laying 16 and 24" cast-iron pipe	140 feet.

All bids must be made on the blank form of proposal furnished by the town and must be accompanied by a certified check for the sum of $2,000. A bond in the sum of $10,000 will be required for the faithful performance of the work or other security satisfactory to the town.

Also sealed bids or proposals for the waterproofing of the present distributing reservoir will be received until the above time and date.

The waterproofing will consist of about 3,480 square yards of layers of roofing felt and coal tar pitch placed upon the present concrete lining and covered with a 4" layer of concrete.

Bids must be made upon the blank form of proposal furnished by the town and must be accompanied by a certified check for the sum of $500.00.

A bond in the sum of $2,500 00 will be required for the faithful performance of the work or other security satisfactory to the town.

Plans and specifications for the above may be seen at the Town Clerk's office.

W. F. DONKIN,
Town Clerk and Treasurer

TENDERS FOR

WHEELS, GENERATORS AND TRANSMISSION LINE.

Sealed tenders are required for (1) Turbine Water Wheels, Governor, etc.; (2) Generators, Exciters, Switch Panel, etc.; (3) 2½ miles of Transmission Line; (4) Distribution Line, for the Delhi Light and Power Company. Plans and specifications at the office of JNO. S. FIELDING, C. E., Consulting Engineer, 15 Toronto street, Toronto, Ont., to whom tenders may be sent, or to the office of the Company at Delhi, not later than 27TH INSTANT.

TENDERS

Tenders will be received till 6 p.m., AUGUST 27TH, at the office of the undersigned, where plans and specifications may be seen, for all trades (in bulk or separately) required in the erection of Knox Church, Toronto.

The lowest or any tender not necessarily accepted.

J. WILSON GRAY, Architect,
Confederation Life Building,
Toronto, Ont.

Town of Sault Ste. Marie, Ont.

Sealed Tenders will be received by the Town Clerk until 8 p. m. on

THURSDAY, AUGUST 23rd, 1906,

for the construction of Section 'K' of the Town Sewerage System. The work contemplated is the supplying of the necessary labor and materials for the construction of about 15,000 lineal feet of 8" and 10" Tile Sewers.

Plans, specifications and all information may be obtained at the Town Hall on and after Monday, July 30th, 1906.

C. J. PIM, Town Clerk.

J. H. GIMBY, Mayor.
W. F. GRANT, C. E., Town Engineer.

Debentures For Sale

Sealed tenders will be received by the under signed up to SATURDAY, THE FIRST DAY OF SEPTEMBER, next, for the purchase of the following debentures of the town of Fort Frances: $31,000 Waterworks Debentures dated August 1st, bearing interest at 4½ per cent. repayable at the expiration of 30 years. Interest payable yearly. Principal provided for by a sinking fund of $850,14 deposited yearly. Interest and principal payable at the office of the Treasurer of the town of Fort Frances.

The highest or any tender not necessarily accepted.

Any further information may be had by addressing the clerk.

W. H. ELLIOTT,
Town Clerk.

Tenders for Supply of

Water, Pipe, Specials, Hydrants and Gates

Separate sealed tenders addressed to Ald. J. C. Gibson, Chairman of the Fire, Water and Light Committee, for the supply of a quantity of Water Pipe, Specials, Hydrants and Gates for the City Water Works, will be received at the office of the undersigned up to 2.30 p.m. on

MONDAY, AUGUST 27, 1906

Specifications and forms of tender may be obtained at the office of H. N. Ruttan, City Engineer, Winnipeg, Man.

Each separate tender must be accompanied by an accepted cheque or draft payable to the order of the City Treasurer, or cash deposit for the sum called for in the form of tender supplied, which will be subject to forfeiture in case of failure on the part of the contractor to enter into a written contract with approved sureties if called upon to do so.

The city reserves the right to reject any or all tenders or to accept any bid which appears advantageous to the City of Winnipeg.

C. J. BROWN,
City Clerk.

City Clerk's Office, Winnipeg, August 1, 1906.

A new concern known as the Mechanic's Construction Company, Edmonton, Alta., has recently been incorporated.

ROCK CRUSHING PLANTS

Stationary or Portable
With or Without Power

All Sizes

Rock Crushers
Elevators
Screens
Engines and Boilers

Catalogues on Application

W. H. C. MUSSEN & CO.

Railway, Mining and Contractors' Supplies

MONTREAL

CONTRACTS OPEN.

LANG, SASK.—A new elevator is to be erected here this season.

KINGSTON, ONT.—Plans are being prepared for the new barracks.

SUMMERLAND, B.C.—The C.P.R. purpose making large wharf extensions here.

NANAIMO, B. C. — Tenders have been taken for the building of St. Paul's church.

WOLSELEY, SASK.—R. T. Young is receiving tenders for erection of a school house.

VERDUN, QUE. — The by-law to raise $112,000 for town improvements has been defeated.

EDMONTON, ALTA.—Tenders are being taken for extension to boiler room at the power house.

HALIFAX, N. S.—The I.C.R. intend erecting new roundhouse and workshops here at an early date.

HIRSCH, SASK. — The Alameda Elevator & Trading Company intend building a new elevator here.

STONEWALL, MAN.—Tenders are being taken for the construction of the new Bank of Hamilton building.

KAMLOOPS, B. C.— Plans for the new school building will be revised and fresh tenders called, cost $20,000.

THAMESVILLE, ONT.—On August 27th a by-law will be voted on to raise $9,500 for installing waterworks system.

GANANOQUE, ONT.—Miss Coulton has been granted a permit to build two houses, corner Garden and Stone streets.

THORNBURY, ONT.—A by-law has been passed to provide $5,000 for construction of cement sidewalks in the town.

SHELBURNE, ONT.—F. E. Cole, of the Shelburne Planing Mills, is preparing to build a residence on Main street.

COLLINGWOOD, ONT. — Alex. Foreman intends building an addition to his block, corner Hurontario and Ontario streets.

MOOSOMIN, SASK.—W. Chipman, C. E., Toronto., has reported on the cost of installing waterworks system, cost $25,000.

ROULEAU, SASK. — The congregation of the Anglican church are considering the erection of a new church building.

SIMCOE, ONT. — Tenders will be received up to August 15th for the erection of a hall on the premises of the Baptist church.

OAKVILLE, ONT.—A by-law has been carried to raise $40,000 for waterworks system and $10,000 for electric light plant.

ST. CHARLES, MAN.—F. Ness will receive tenders up to August 15th for purchase of $1,500 five per cent. school debentures.

BANFF, ALTA.—The work on the enlargement of the C.P.R. hotel here will be proceeded with at the close of the tourist season.

BEAMSVILLE, ONT.—By-laws have been carried to raise $12,000 for new sidewalks and to grant free site, etc., to the canning factory.

WAPELLA, SASK.—Kidd & Clements have made preparations for building their new block.—Erection of new town hall will soon begin.

GILBERT PLAINS, MAN. — W. Findlater is preparing for the erection of a new brick residence.—W. C. Inglis will build a residence here.

PETERBORO, ONT.—It is reported that J. M. Brooks has secured an option on a site in a central locality for a hotel building to cost $20,000.

LADYSMITH, B.C.—The plans for the new Government wharf have been deposited with the Department of Lands and Works.

PEMBROKE, ONT.—The Council gives notice of its intention to construct six inch tile sewer on Wellington street from Peter to Commercial.

WALKERVILLE, ONT. — Tenders are being invited for the erection of a Home Bank building on Wyandotte street and Windermere road.

NORTH SYDNEY, N.S. — Vooght Bros. have recently sold property on Commercial street on which it is expected a new building will be erected.

ORILLIA, ONT.—J. C. Rose, Township Treasurer, will receive tenders up to August, 31st for purchase of $10,120 five per cent. drainage debentures.

BELLEVILLE, ONT.—The Standard Bank have secured the premises, corner Bridge and Front streets, which they will have fitted up for their offices.

EAST TORONTO, ONT.—Dr. Sisely, of Agincourt, has purchased the property corner Kingston road and Main street on which he will erect a residence.

PARRY SOUND, ONT. — Plans have been prepared for a three-storey store to be built corner James and Seguin streets for Wm. Beatty Company.

MASSEY STATION, ONT. — The town are considering the erection of a new school, cost $4,000, also construction of waterworks system, cost $10,000.

RAPID CITY, MAN.—D. E. B. Daly will receive tenders up to August 27th for the purchase of $2,500 five per cent. debentures, also $4,500 town debentures.

KITAMAAT, B.C. — The Women's Missionary Society of the Methodist church have decided to rebuild the home at this place, burned a short time ago.

NEEPAWA, MAN.—The City Council gives notice of its intention to construct granolithic sidewalks on Hamilton and Second streets and Mountain avenue.

STURGEON FALLS, ONT.—The town will vote on a by-law to grant a free site and bonus of $8,500 to the North Ontario Reduction & Refining Company.

PENETANGUISHENE, ONT. — The Water Committee will receive tenders up to August 18th for laying water pipe, etc., for extension to water mains.

SPRINGHILL, N. S.—D. McLeod, Town Clerk, will receive tenders up to August 15th for erection of a town hall.—Plans have been prepared for new central school building.

RESTOCK, ONT.—J. Kreutzer, Township Clerk, will receive tenders up to August 27th for construction of Central Black Creek drain, in Ellice Township. Plans at Post Office.

COQUITLAM, B. C.— Tenders are being received by the Deputy Commissioner of Lands and Works, Victoria, for erection of a two-roomed school building at Millside.

BRANTFORD, ONT.—Building permits have been issued as follows: L. E. Eddy, brick dwelling, Palmerston ave., cost $3,000; A. Cox, brick dwelling, Victoria street, cost $1,550.

ST. BONIFACE, MAN.—On August 30th by-laws will be voted on to raise $100,000 for bridges over Red and Seine rivers, $55,000 for public park and $100,000 for school purposes.

PINCHER CREEK, ALTA.— The McDonald Milling Co., of Calgary, will erect a large flour mill and elevator here. —It is understood that the Union Bank will erect a new building this fall.

PORTAGE LA PRAIRIE, MAN.—Tenders will be received up to August 23rd for erection of a brick factory for the London Fence, Limited. Plans with Macdonald & Fleming, 263 Portage avenue, Winnipeg.

SUSSEX, N. B.—J. R. McLean will receive tenders up to August 18th for erection of a brick and stone school building. Plans with above named and with L. R. Fairn, architect, Aylesford, N. S.

AMHERSTBURG, ONT. — The Council gives notice of its intention to construct Silex stone walks on Park, Richmond, Simcoe, Seymore, Bathurst, King, Maple, North, Dalhousie and Murray streets.

OKOTOKS, ALTA.—The Methodist congregation are considering the erection of a new church on Railway street.—The Union Bank intend building a brick veneer office building corner Main and Railway streets.

DUNNVILLE, ONT.—Tenders will be received up to August 23rd for erection of a new brick and stone Presbyterian church. Plans with W. D. Swayze, this place, and with W. Fletcher Shepherd, architect, London.

ST. JOHN'S QUE. — F. Gelinas, Department of Public Works, Ottawa, will receive tenders up to August 27th for construction of post office building here. Plans at the Department and with J. E. Benoit, architect, of this place.

ST. JOHN, N. B.—Tenders will soon be called for construction of new warehouse at the wharf.—The premises of the Benevolent Home on Waterloo street has been chosen for manual training and domestic science school. It will be remodelled.

SOUTHAMPTON, ONT.— By-laws have been carried for improvements to the waterworks system and to grant the following loans: $15,000 towards the establishment of a furniture factory; $10,000 to S. Knechtel for foundry, etc., and $5,000 to C. Williams for grist mill.

LETHBRIDGE, ALTA.— The site of the new model farm has been chosen on which a residence will be erected, cost $5,000.—The following building permits

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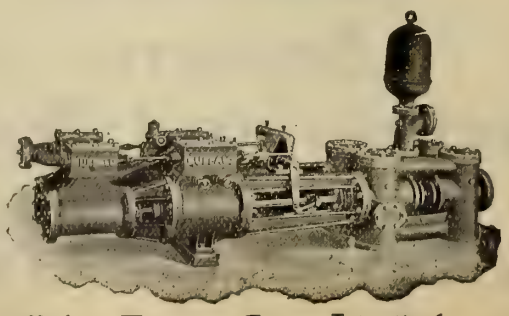

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have been issued: Wm. Oliver, brick block, $8,000; J. A. Virtue, brick dwelling, $1,000; S. Crest, frame dwelling. $2,000.

VICTORIA, B.C.—The Council gives notice of its intention to construct concrete sidewalks on Gorge, Caledonia, Fisguard, Cormerant, Fort, Elliott, South, Clarence, Rithet, Michigan, Oswego and St. John streets.—The City Council will submit a by-law to provide $200,000 for water-works purposes.

ST. MARY'S, ONT. — F. Gelinas, Department of Public Works, Ottawa, will receive tenders up to August 20th for construction of post office building. Plans at the Department and with the Postmaster here.—The North Midland Electric Railway have plans to erect a power house, barns and repair shops here, cost about $100,000.

TORONTO JUNCTION, ONT.—Building permits have been issued as follows: A. Powley, two story brick dwelling, Vise street, cost $1,850; S. C. Heston, two story brick dwelling, Maria street, cost $2,000; Baptist Church, addition to church on Annette street, one story brick, cost $4,500; J. W. Butchart, two story brick dwelling, Central avenue, cost $1,800; Waddell & Snider, two-story and attic brick dwelling, Pacific avenue, cost $3,500.

CALGARY, ALTA. — The Tudhope Carriage Company, of Orillia, Ont., have purchased a site for a large warehouse, cost $25,000.—Plans are being prepared for a wholesale warehouse for the Ashdown Hardware Company.— The Bell Telephone Co. have decided to erect a building and plant here, cost $100,000.—It is understood that the Baptist denomination intend erecting a new church in the west end.

MONTREAL, QUE.—Plans for the new Bank of Commerce building on site of Temple building will soon be completed.—The C.P.R. purpose having a survey made for a new line through the Quebec section of the Temiskaming district.—The work of building the new St. Lawrence bridge will soon begin. The company propose building union terminals and a hotel in connection with it.—The trustees of Hochelaga church have secured a permit for alterations to that building, cost $39,500.—A company, with capital of $2,000,000, is being formed to erect a large hotel on a down town site.

STRATFORD, ONT.—Building permits have bsen issued as follows: Thos. Dunseith, frame residence, Birmingham street; T. J. Wilkins, concrete factory, Nile street; Ed. McKeown, brick veneer residence, Huron street; George Litt, brick residence, John street; Geo. McLagan, brick residence, Water street; Alex. McMullen, two brick veneer residences, King street; D. Jacobs, brick planing mill, Bay street; G. and F. B. Deacon, cement block and metal residence, Brunswick street; F. B. Deacon, two brick residences, Dufferin street; Harry Wilson, brick residence, William street.

HAMILTON, ONT.—The congregation of Sherman avenue Presbyterian church are considering the erection of a new church.—It is understood that John Lyle will prepare plans for the new Central Presbyterian church.—The following building permits have been issued: Stewart & Witton, architects, drill hall, cost $225,000; W. A. Edwards, architect, Barton street Methodist Sunday school building, cost $11,500; S. Frank, brick workshop, John street, cost $1,600; J. Campbell, brick residence, McCauley street, cost $1,400.—The Cataract Power Company have purchpsed a site on King street for the terminal depot.

LONDON, ONT.—The Council have decided to grant the issue of $10,000 of debentnres for a new school on Chesley avenue.—The following building permits have been issued: Chalmers Presbyterian church, corner Waterloo and Grace streets; Gospel Hall mission, corner Gray street and Hamilton road; J. Lyttle, brick veneer dwelling on Elias street; W. G. Murray, architect' five residences. —A. O. Graydon, City Engineer, will receive tenders up to August 16th for construction of sewers in Grosvenor and York streets.—The City Council purpose constructing tile sewers in Marley place, Mary and Egerton streets, Central and Duchess avenues, also a number of cement walks, etc.

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OTTAWA, ONT.—Plans are being prepared for an additional wing to the House of Commons.—It is expected that the competition for architects' plans for new departmental building will be set on foot this fall.—It is said the G. T. P. R. will soon call for tenders for extensions eastward from Lake Superior Junction and westward from LaTuque.—Plans for the heating, plumbing and ventilation of St. Jean Baptiste school, Breboeuf, and the plumbing of St. Agnes school are being called for.—N. J. Kerr, City Engineer, will receive tenders up to August 15th for construction of bitulithic and block pavement on Elgin street, from Albert to Argyle avenue.

VANCOUVER, B. C.—The plans for the new school building on Westminster avenue have been prepared and tenders will soon be called.—The following building permits have been issued: Thomas Hunter, Melville street, $1,500; H. A. Jones, Hastings street, $1,500; Thomas Hunter, Haro street, $3,500; Thomas Hunter, Barclay street, $3,000; A. St. G. Hamersley, Water street, $30,000; F. and D. Reilly, Barnard street, $1,600; W. Clubb, Beach avenue, $5,500; Baynes & Horie, Water street, $14,000; W. J. Beam, Pandora street, $1,800; Mrs. Templeton, Carrall street, $10,000; A. Hogg, Cornwall street, $1,500; D. R. Brown, St. George street, $2,000; H. Walker, Tenth avenue, $1,600.—The Stave Lake Power Co. intend increasing the height of the dam on Stave river by 19 feet.—A site has been secured on the corner of Nelson and Nicola streets for a new fire hall.—J. S. Wallace will erect a residence on Harris street, cost $4,700.

REGINA, SASK. — The Canadian Drug Co. have decided to erect a warehouse here.—W. W. LaChance, architect, has prepared plans for a residence on Cornwall street for Miss Harding, cost $3,500.—The Peterboro Cement Roofing Company intend erecting a new factory here.—Blair & Northwood, architects,

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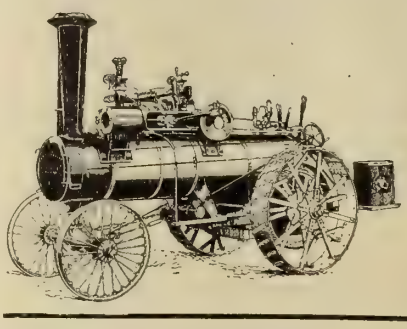
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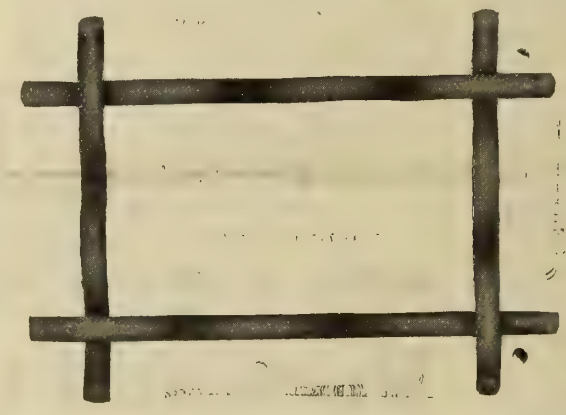
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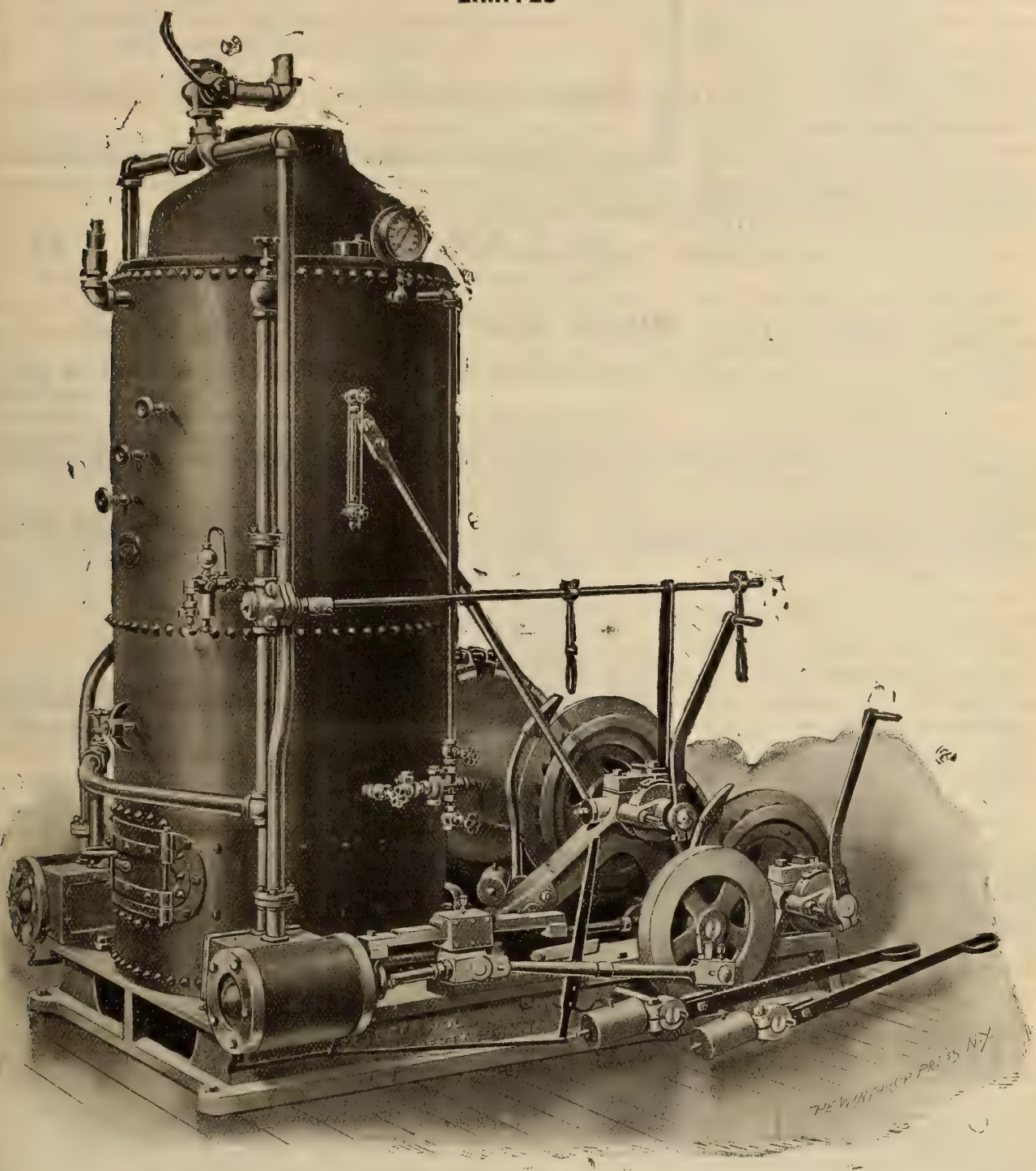

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Winnipeg, will receive tenders up to August 15th for construction of a five-storey bank building. — The following building permits have been issued: Canada Permanent, block, $50,000; G. Mickleborough, store, $15,000; M. J. Phllip, house, $2,200; Fred Bradshaw, house, $2,300; J. P. Merrick, house, $5,000; J. S. McCannell, house, $3,500; W. P. Gillespie, house, $3,200, J. W. A. Black, house, $2,400; W. A. Wilson, house, $2,500; Grant & Lonsborough, $2,300; M. Gardner, house, $2,500; H. E. Wilkinson, house, $2,200; W. K. Shaw, house, $2,000; J. J. Weir, house, 73,500; J. H. Haslam, office block, $50,000; Mrs. Susan M. Beach, house, $2,800.—The Board of Trade and City Council favor the erection of a union depot.—It is expected that J. Finkelstein of Winnipeg will erect a store on South Railway street.

WINNIPEG, MAN.—The Fire, Water & Light Committee will receive tenders up to August 27th for supplies and apparatus.—D. Smith, architect, has taken tenders for erection of a block on Main street for P. A. Crump.—W. Suckling & Co., real estate brokers, have sold a site, corner Clark and River avenues, for an apartment block.—The Union Warehouse Co. is being organized to erect a large warehouse on Sutherland avenue. R. A. McCready is interested. — Tenders will soon be called for construction of asphalt pavement on Henry avenue, cost $13,592, also a number of granolithic sidewalks and other work. — The Committee on Works have taken tenders for macadam pavement on Elmwood street, also for construction of granolithic walks and sewers.—D. Smith, architect, will receive tenders up to August 17th for erection of a brick factory for the Canada Paint Company.— Blair & Northwood, architects, will receive tenders up to August 18th for erection of a brick and stone residence on Roslyn road.—Same architects have taken tenders for erection of

(Continued on page 14.)

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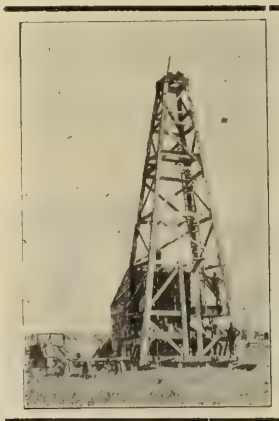

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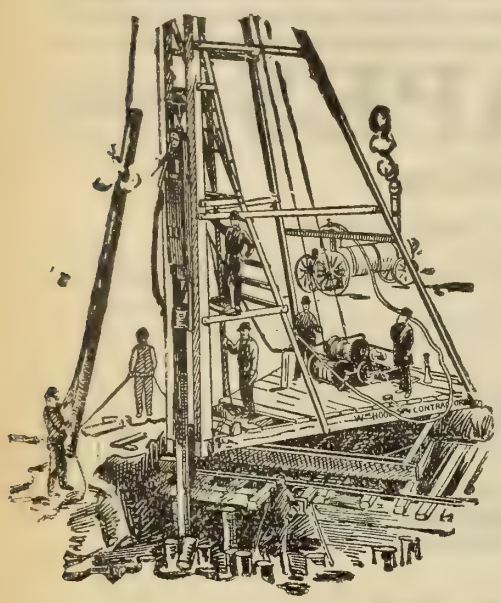

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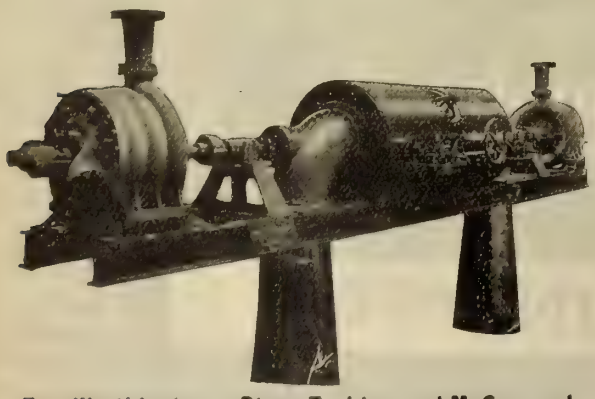

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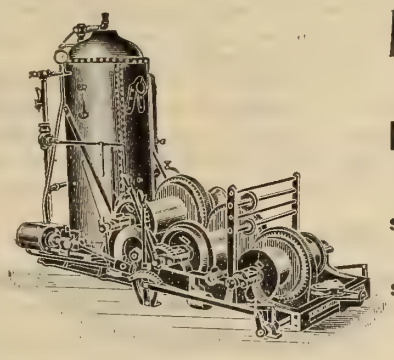

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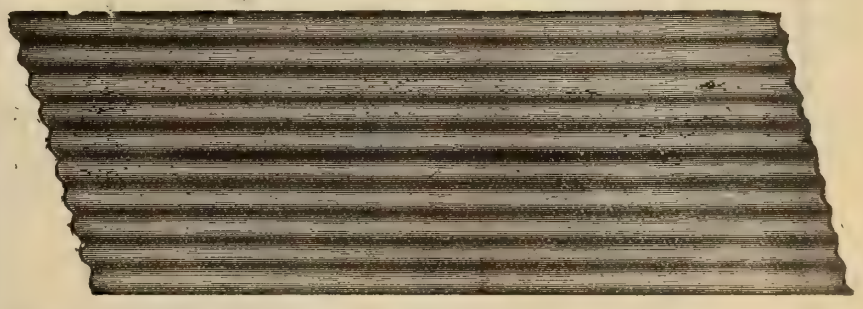

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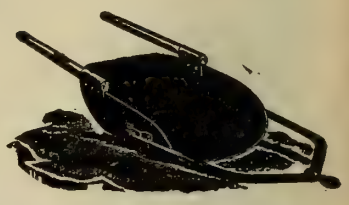

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							Neat.					3 (Sand) to 1 (Cement)				
					Initial	Final	1 dy	7 dys	28 dys	3 mos	1 yr.	1 dy.	7 dys.	28 dys.	3 mos.	1 yr.
1903	20	O.K.	3.135	2.1	162	345	307	701	783	827	*	74	214	299	367	*
1904	44	O.K.	3.150	2.0	132	342	300	744	848	914	938	86	262	354	401	427

* Tests for 1 year were not completed when records closed. 1905 report not yet issued.

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coal warehouse on Henry street.—The Home Bank have purchased the property at 426 Main street, which they will have remodelled for bank purposes. — The plans for the new Union depot are being prepared and it is expected the site will be on Broadway.

TORONTO, ONT.— J. P. Hynes, architect, is preparing plans for a fireproof hotel on Yonge' street, near Wellington, cost about $60,000.—Copland & Fairbairn, real estate brokers, have sold a site on Westmoreland ave. to J. Bushby, for a residence.—J. Wilson Gray, architect, will receive tenders up to August 27th for erection of Knox church. —The Board of Control will receive tenders up to August 22nd for supply and erection of steam piping for the high pressure fire service.—Tenders have been taken for construction of asphalt pavement on Orford, Melville and Hallam streets, bitulithic pavement on Cottingham street and Olive and Palmerston avenues also a number of concrete walks, etc.—Tenders are being received at 779 Queen street west for erection of a pair of brick and stone houses.—The Adams Furniture Company have bought the property at 227 to 233 Victoria street on which they intend building a four story warehouse.—It is understood that an apartment house will be erected, corner Roncesvalles and Wright avenues to cost $80,000.—The College of Physicians and Surgeons are looking for a site for new medical building.—The City Council gives notice of its intention to construct asphalt pavement on Ontario street from Carlton to Howard, cost $13,470.—Building permits have been issued as follows: Centennial Methodist Church, 2-story brick church, 703 Dovercourt Road, cost $40,000; H. S. Norris, 2-story brick dwelling, corner Alhambra and Radford streets, cost $2,500; Consumers' Gas Co., 1-story brick and steel coal shed, Eastern avenue, cost $70,000; O'Keefe Brewery Co., alterations to hotel, corner Front and George streets, cost $2,500; Thos. Peacock, 2½-story roughcast dwelling, brick front, Logan avenue, near Queen street, cost $3,500; O. Bell, 2½-story brick veneer and R. C. dwelling, 96 Hogarth avenue, cost $2,000; Robt. McKay, six 2½-story brick dwellings, Macpherson ave., near Avenue Road, cost $12,000; Ansman & Marshall, 2½-story brick dwelling, Wells street, cost $3,000.

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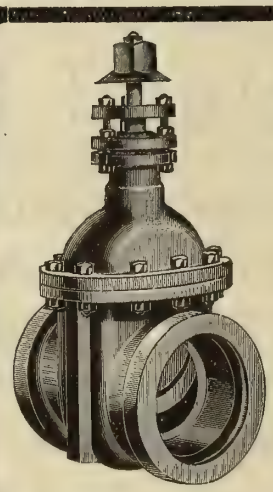
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CALGARY, ALTA.—$203,000 city debentures: National Trust Company, purchasers.

DUNDAS, ONT.—Additions to buildings of Bertram & Sons: G. E. Mills, contractor, Hamilton.

VANCOUVER, B. C.—Supply of cast-iron pipe for city: Evans, Coleman & Evans, contractors, cost about $33,000.

YELLOW GRASS, SASK. — Heating system in Bank of Commerce building: Hockin & Siddons, contractors, Moose Jaw.

MARKHAM, ONT.—Kelsey system of warming and ventilating in public school building: James Smart Manufacturing Co., contractors, Brockville.

WINNIPEG, MAN.—Hotel on Carlton street for W. S. McDonald: Carpentry, M. Germain; masonry, Le Monte & Brenner. Stevenson & Paterson, architects.

SASKATOON, SASK. — Construction of traffic bridge over Saskatchewan river: Steel superstructure, Canadian Bridge Co., Walkerville, Ont., $64,000; concrete substructure, Green & Sons, Winnipeg, $40,000.

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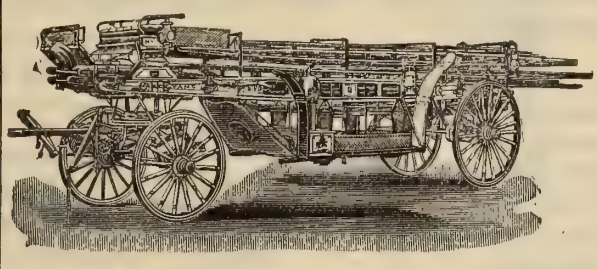

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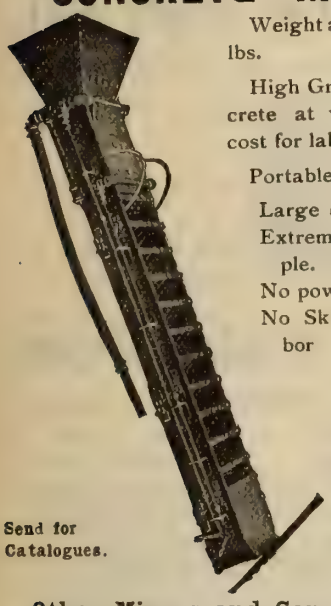

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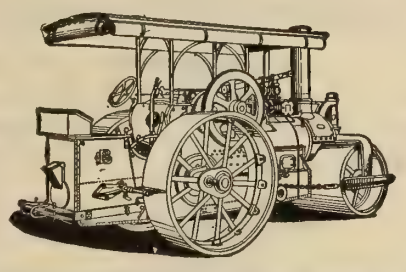

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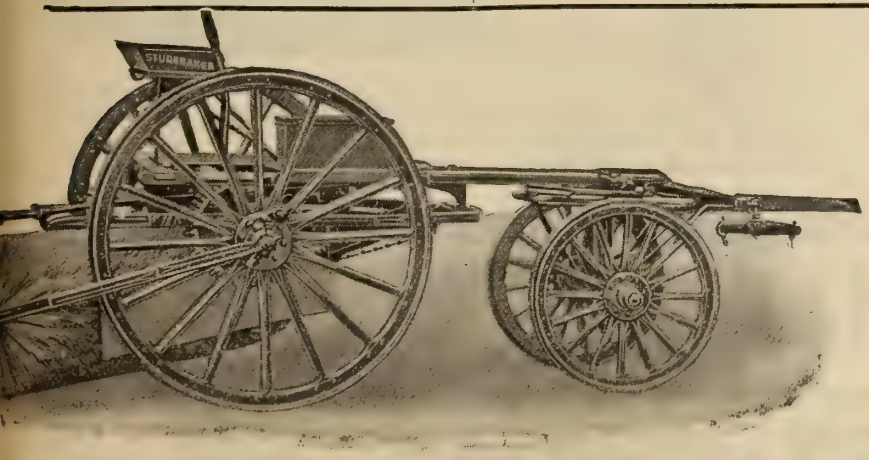

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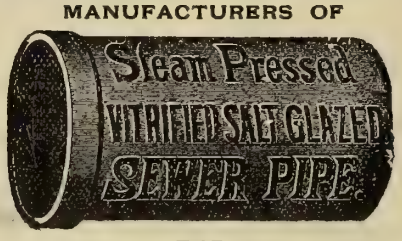

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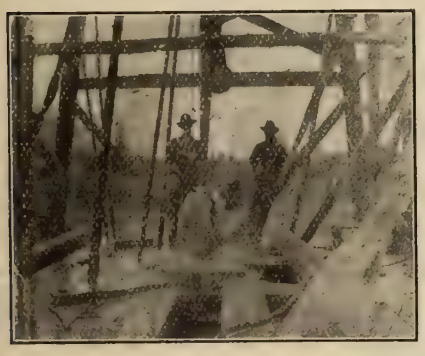
Fire Engines, Steam and Gasoline
Concrete and Macadam Stone

J. HARVEY
CONTRACTOR
PETROLEA, ONT.
Driller of Oil, Gas, Salt or Artesian Wells. Deep Wells a Specialty.



Contracts taken in any part of Canada. Several years experience in Artesian Wells for Municipal Water Works. Estimates or geological information cheerfully furnished.
REFERENCES GIVEN

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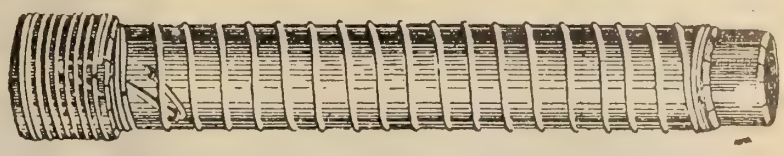

High pressure pipe for **Water Works Systems,** irrigation power plants, etc. Sizes 2" to 24", half the cost of cast iron. **Write for Catalogue.**
PACIFIC COAST PIPE CO., LTD. Box 563, Vancouver, B. C

W. & F. P. CURRIE & CO.
345 St. James St., Montreal
Importers of
SEWER PIPES,
CULVERT PIPES, ETC.
VENT LININGS,
FLUE COVERS,
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PORTLAND CEMENTS,
HIGH GRADE ENGLISH
" " GERMAN
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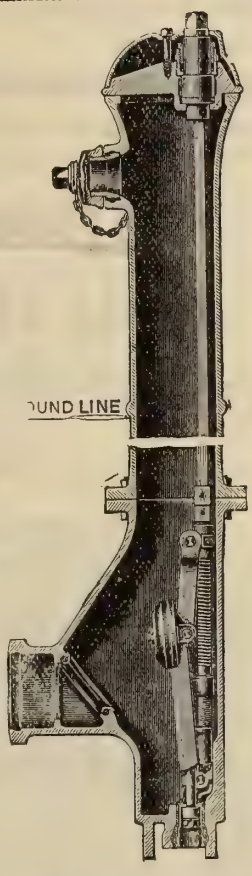
PLASTER OF PARIS
BORAX,
CHINA CLAY.



WATERWORKS SUPPLIES
HYDRANTS — VALVES
PIPE FITTINGS
STEAM PUMPS
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Specification Respectfully Solicited.

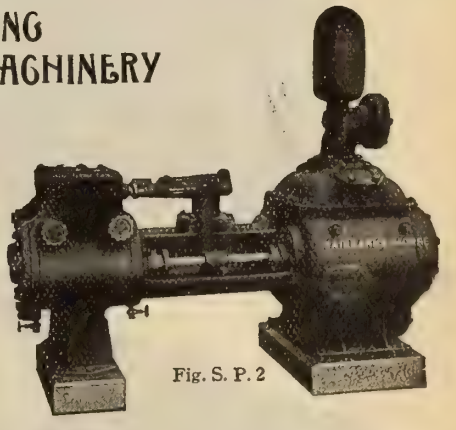


Fig. S. P. 2

The **Canadian Fairbanks Co.,** Limited
MONTREAL TORONTO WINNIPEG VANCOUVER

"RAVEN" PORTLAND CEMENT
— Unexcelled for Strength and Uniformity —
RAVEN LAKE PORTLAND CEMENT CO.
Limited
Long Distance Telephone: RAVEN LAKE, ONT. Telegraph and Post Office Address: VICTORIA ROAD, ONT

The firm of Cleroux & Dupars, contractors, Montreal, has been dissolved.

The partnership of Thompson & Roulston, painters, Greenwood, B. C., has been dissolved. The business will be continued by G. H. Thompson.

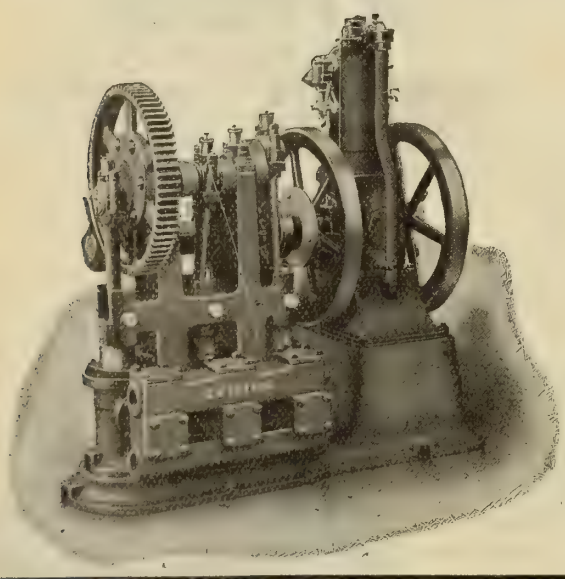
SIMPSON & LEWIS
Civil Engineers
Electric, Hydraulic Plants, Waterworks, Sewerage, Bridges.
33 Bank St. Chambers, OTTAWA.

Advertisements in the CONTRACT RECORD bring results

The British Columbia General Contract Company, Limited
Telegraphic Address: "Dredging" Fairfield Building, VANCOUVER, B. C.

ENGINEERS and CONTRACTORS

Municipal Works and Buildings
Bridges
Concrete Construction
Harbor Works
Railways
Dredging and Reclamation



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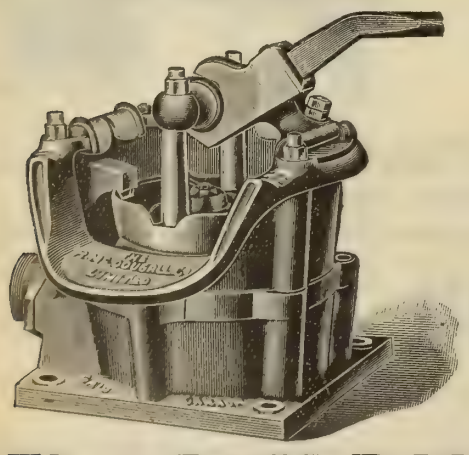
TRIPLEX POWER PUMPS . . . .
DUPLEX STEAM PUMPS . . . .
SINGLE CYLINDER STEAM PUMPS

For every service

Our 110 page Catalogue "G" containing a great deal of valuable information will be mailed on application

DARLING BROTHERS, LIMITED
Branch Offices: TORONTO WINNIPEG
Reliance Works: MONTREAL



DIAPHRAGM PUMPS

For Contractors' Use.—This class of pump will handle about anything that is wet and their usefulness has been shown in thousands of cases. We try always to have a few on hand for Emergency orders, also extra Diaphragms and 3" Suction Hose and Fittings.

Try us once if in a hurry or even if you have lots of time.

We also Supply

Manhole Covers and Frames,
Catch Basins, Pavement Plates, Etc.

The R. McDOUGALL COMPANY, Limited,
GALT, CANADA.

Head Office and Works,

Toronto, Ont.

CAST IRON PIPE FOR WATER OR GAS

Special Castings,

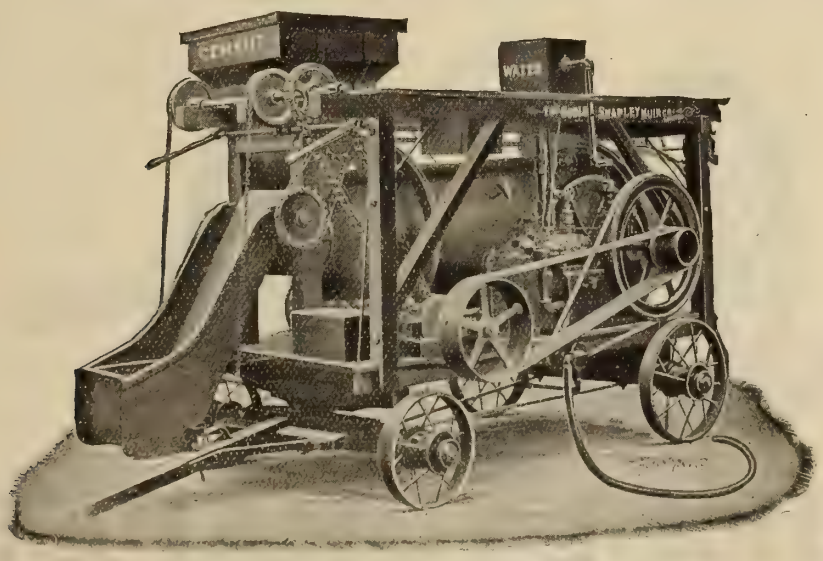
Tees, Crosses, Flanges Pipe, Valves, Hydrants,

Stand Pipes, Valve Boxes, Drinking and Ornamental Fountains.

District Offices: MONTREAL, HALIFAX, OTTAWA, WINNIPEG, VANCOUVER, ROSSLAND

Ideal Automatic Concrete Mixers

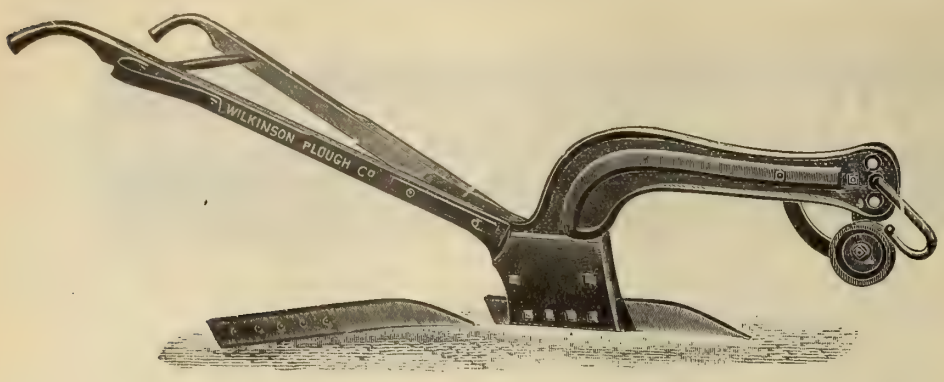
The Only Successful Automatic Mixer Made



We also manufacture **Windmills, Tanks and Towers**
for Waterworks, Fire Protection, Etc.

WE INVITE CORRESPONDENCE

GOOLD, SHAPLEY & MUIR COMPANY, LIMITED
BRANTFORD, CANADA



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For all Classes of Service

PICK PLOWS

for Tearing up

Macadam Roads, Asphalt Hard Pan or Stumps, Etc.

The Best Plow for Extra Heavy Work.

IN STOCK

The above cut shows our "COLUMBUS" DRAG SCRAPER

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RAILROAD PLOWS
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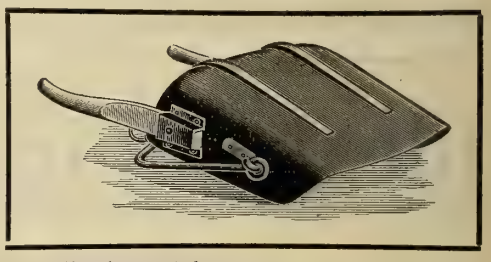
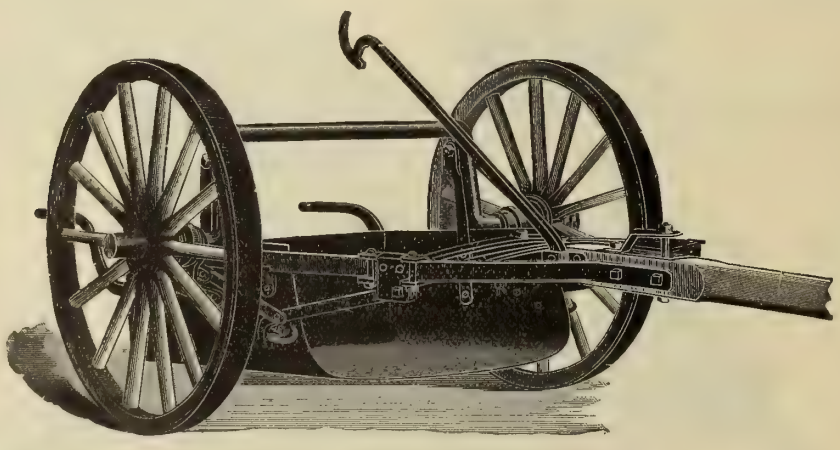
LOW PRICES



The above cut shows our "BOSS" DRAG SCRAPER W. R.

All Styles and Capacities in Stock



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— WHEELSCRAPERS —

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Successors to the Late James Cooper

MONTREAL

Dunn Bros., Winnipeg, Agents

CANADIAN

Contract Record

A Weekly Journal of Public Works, Tenders, Advance Information and Municipal Progress

This Paper Reaches Every Week the Town and City Clerks, Town and City Engineers, County Clerks and County Engineers, Purchasers of Municipal Debentures and Leading Contractors in All Lines Throughout Canada

VOL. 17. TORONTO, MONTREAL — AUGUST 22, 1906 — WINNIPEG, VANCOUVER No. 25

THE CANADIAN CONTRACT RECORD
PUBLISHED EVERY WEDNESDAY
As an intermediate Edition of the Canadian Architect and Builder.

THE C. H. MORTIMER PUBLISHING COMPANY
of Toronto, Limited.

Subscription Price, $2 per annum, payable in advance.

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Telephone Main 2362.

Branch Offices:
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720-721 Union Bank Building, Winnipeg. Telephone 1274
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WANTED

Information regarding good farm for sale with good title somewheres near Toronto. Give price and description and character of soil. Also state when possession can be had. Owners only need answer. State how far from town, and mention improvements. Address
W. C. CUNNINGHAM,
Andrus Bldg., Minneapolis, Minn.

TENDERS FOR WHEELS, GENERATORS AND TRANSMISSION LINE.

Sealed tenders are required for (1) Turbine Water Wheels, Governor, etc.; (2) Generators, Exciters, Switch Panel, etc.; (3) 2½ miles of Transmission Line; (4) Distribution Line, for the Delhi Light and Power Company. Plans and specifications at the office of JNO. S. FIELDING, C. E., Consulting Engineer, 15 Toronto street, Toronto, Ont., to whom tenders may be sent, or to the office of the Company at Delhi, not later than 27TH INSTANT.

$34,000.00
TOWN OF CARMAN
Debentures for Sale

Sealed tenders addressed to the Secretary-Treasurer of the Town of Carman and marked "Tender for Waterworks and Sewer Debentures" will be received up to 8 o'clock p.m. on SATURDAY, THE 25TH DAY OF AUGUST, 1906, for the purchase of Debentures of the Town of Carman amounting to Thirty-Four Thousand Dollars ($34,000.00) with payments distributed over a period of twenty years from the Thirtieth Day of June A.D., 1906, with interest at the rate of five (5) per cent. per annum

Principal and interest payable at the Canadian Bank of Commerce, Carman, and the debentures such that the total amount of principal and interest will be as nearly equal as may be in each year.

The highest or any tender not necessarily accepted.

Any information desired may be obtained by addressing the Secretary-Treasurer.

A. MALCOLMSON,
Secretary-Treasurer of the Town of Carman.

Dated at Carman, Man., July 18th, 190.

Tenders for DAM and POWER HOUSE

Sealed tenders will be received by the undersigned at their office, 123 Bay Street, Toronto, until noon, SEPTEMBER 5TH, 1906, for the construction of a Dam and Power House at Eugenia Falls, Grey County, Ontario. Plans and specifications may be seen at the above address.

The right is reserved to reject any or all tenders.

GEORGIAN BAY POWER CO., LT'D.
THOMAS McLAUGHLIN,
Secretary-Treasurer.

Toronto, August 10th, 1906.

$24,000.00
TOWN OF CARMAN
Debentures for Sale

Sealed tenders addressed to the Secretary Treasurer of the Town of Carman and marked "Tender for Electric Light and Power Debentures" will be received up to 8 o'clock p.m. on SATURDAY, THE 25TH DAY OF AUGUST, 1906, for the purchase of Debentures of the Town of Carman amounting to Twenty-Four Thousand Dollars [$24,000.00] with payments distributed over a period of Thirty Years from the Thirtieth Day of June, A. D., 1906, with interest at the rate of five [5] per centum per annum.

Principal and interest payable at the Canadian Bank of Commerce at Carman, and the debentures such that the total amount of principal and interest will be as nearly equal as may be in each year.

The highest or any tender not necessarily accepted.

Any information desired may be obtained by addressing the Secretary-Treasurer.

A. MALCOLMSON,
Secretary-Treasurer of the Town.

Dated at Carman, Man., July 18th, 1906.

To Bridge Builders

Sealed tenders marked "Tenders for Priceville Bridge," addressed to John McArthur, County Councillor, Priceville, will be received up to two o'clock p.m. on FRIDAY, 24TH AUGUST, INSTANT, for the erection of a Steel Bridge over the Saugeen River, on the town line between Artemesia and Glenelg townships, according to plans and specifications prepared by I. Traynor, engineer, and which may be examined at the store of John McArthur in the said village of Priceville. The work to be completed inside of 30 days from the time of letting of the contract.

Tenders may be put in for the work complete, or for Concrete Abutments, for Steel Work and Flooring, for Filling Embankment and removing of old bridge.

Each tender must be accompanied by a certified bank cheque for the sum of 5 per cent. of the total contract price, payable to the Treasurer of the County of Grey, which shall be forfeited to the county in case the party tendering shall fail to enter into the contract at the price stipulated in tender, when called upon to do so, or to furnish satisfactory security for the due fulfilment of said contract.

The lowest or any tender not necessarily accepted.

JOHN McARTHUR,
County Councillor.

Priceville, August 2, 1906.

Debentures For Sale

Sealed tenders will be received up to noon of MONDAY, SEPTEMBER 3RD, 1906, for the purchase of $20,000 Water Works Debentures of the Town of Oshawa dated August 13th, 1906, bearing interest at 4½ per cent. per annum, and repayable at the office of the Treasurer, Oshawa, in 30 equal annual installments of principal and interest. The highest or any tender not necessarily accepted.

THOS. MORRIS,
Town Clerk.

TOWN OF MOOSOMIN
Province of Saskatchewan
TENDERS FOR
WATER WORKS

Sealed tenders addressed to the Secretary-Treasurer of the town of Moosomin, Sask., will be received until 7.15 p m. on

TUESDAY, SEPTEMBER 4TH, 1906,

for the following subdivisions of the proposed works:

Contract "A"—Trenching, Pipelaying, etc., for 6,000 feet of water mains and 2,600 feet of storm sewers.
Contract "B"—Pump House.
Contract "C"—Steel Water Tower.
Contract "D"—Pipes and Specials.
Contract "E"—Valves and Fire Hydrants.
Contract "F"—Sewer Pipes.
Contract "G"—Fire Pump and Gasoline Engines.

Plans and specifications will be ready for inspection and may be seen at the office of the Chief Engineer, 103 Bay street, Toronto, Ont., or at the office of the Secretary-Treasurer, Moosomin, Sask., about August 2.st, 1906.

No tender necessarily accepted.

A. WHYTE, Esq., Mayor, Moosomin, Sask.
JOHN SMITHERS, Esq., Secretary-Treasurer, Moosomin, Sask.
WILLIS CHIPMAN, C.E.
Chief Engineer,
103 Bay Street,
Toronto, Ont.

Debentures for Sale
County of Hastings

Sealed tenders will be received by the undersigned up to noon of TUESDAY, 4TH DAY OF SEPTEMBER, 1906, for the purchase of twenty debentures of the County of Hastings aggregating $27,000, drawing 5 per cent. interest. One debenture and all interest coupons paid each year amounting to say $2,166.35. First of such payments on sixth day of August, 1907. The highest or any tender not necessarily accepted.

Further information given on application to

B. MALLORY,
Treasurer County of Hastings,
Belleville, Ont.

[FOR ADDITIONAL ADVERTISEMENTS FOR TENDERS SEE NEXT PAGE.]

TENDERS

for Hot Water Heating of St. Marys Schools, McDonnell Square, Toronto, will be received until 5 o'clock p.m. FRIDAY, 24TH INST.

Tenders to be addressed to the Chairman of the Management and Supplies Committee, Separate School Board, 23 Duke Street. Specifications may be seen at the office of the Architect of the Board,

A. W. HOLMES.
10 Bloor Street East, Toronto.

Sealed Tenders

will be received up to SEPTEMBER 1ST, NOON, 1906, for the erection and completion of a Public Library building, in whole or in parts, in the Town of Bracebridge. A marked cheque for 10 per cent. of the amount of tender must accompany each tender as a guarantee of good faith and will be returned to each unsuccessful tenderer as soon as contract is signed. Lowest or any tender not necessarily accepted. Plans and further particulars on application to the secretary of Library Board, Box F, Bracebridge, Ont.

MOSES J. DICKIE,
Secretary.

To Builders, Contractors and Others

First Class Contractors Man is open for re-engagement to manage or partly manage business, competent to take quantities and estimate for all trades; good draughtsman, thoroughly competent in the preparation and adjustment of accounts, good organizer and manager, salary $150.00. Only first-class firms with permanent position to right man need apply to Box 34 Board of Trade building, Montreal.

SALE OF DEBENTURES

Sealed bids will be received by the undersigned, the City Treasurer of the City of Fredericton, New Brunswick, at his office in the City of Fredericton, until noon SEPTEMBER 15TH, 1906, for any or all of the following City Debentures issued under authority of the Acts of Assembly of New Brunswick:

$45,000 Fredericton Water Improvement Bonds bearing 4%, payable half yearly on March 15th and September 15th, principal payable $1,000 annually, beginning September 15th, 1911, and balance of $20,000 payable September 15th, 1946.

Also $15,000 Sewerage Bonds at the same rate with accrued interest from July 15th 1906, maturing July 15th, 1946. All above bonds are issued in amounts of $500 each.

The City reserves the right to reject any or all bids or to accept any bid.

I. R. GOLDING,
City Treasurer.

Fredericton N. B., August 13th, 1906.

Tenders Wanted

Sealed bids or proposals for construction of a concrete masonry dam and appurtenances in the Town of Amherst, N. S., will be received at the Town Clerk's office until 5 o'clock p.m. AUGUST 27TH, 1906.

All bids will be compared upon the Engineer's estimates of quantities of work to be done as follows:

Surface excavation	4,000 cubic yards
Embankment	6,500 " "
Slope paving	100 square "
Rock excavation	600 cubic "
Concrete masonry	3,700 " "
Portland cement in barrels	2,300 bbls.
Portland cement in bags	2,300 bbls.
Gate house superstructure.	
Seeding.	

Laying 16 and 24" cast-iron pipe.....140 feet.

All bids must be made on the blank form of proposal furnished by the town and must be accompanied by a certified check for the sum of $2,000. A bond in the sum of $10,000 will be required for the faithful performance of the work or other security satisfactory to the town.

Also sealed bids or proposals for the waterproofing of the present distributing reservoir will be received until the above time and date.

The waterproofing will consist of about 3,480 square yards of layers of roofing felt and coal tar pitch placed upon the present concrete lining and covered with a 4" layer of concrete.

Bids must be made upon the blank form of proposal furnished by the town and must be accompanied by a certified check for the sum of $500.00.

A bond in the sum of $2,500 00 will be required for the faithful performance of the work or other security satisfactory to the town.

Plans and specifications for the above may be seen at the Town Clerk's office.

W. F. DONKIN,
Town Clerk and Treasurer

THE BOARD OF EDUCATION

TENDERS WANTED

Sealed tenders, addressed to the Secretary-Treasurer of the Board, will be received until

Friday, August 31st, 1906, (Noon)

for the several works required for the enlargement of the following schools, viz:

ESSEX STREET
WITHROW AVENUE

Plans and specifications may be seen and all information obtained at the offices of the Board, City Hall. Each tender must be accompanied by the deposit mentioned in the said specifications and forms of tender. The lowest or any tender will not necessarily be accepted.

W. C. WILKINSON, Secretary-Treasurer.
H. SIMPSON, Chairman of Committee.

TENDERS FOR SLATING, ETC.

Tenders addressed to thd undersigned will be received by registered post only up to

Tuesday, September 4th, 1906,

for the Slating, etc., of the roof of Firehall No. 8 College street, situated at south-west corner of College street and Bellevue avenue.

Envelopes containing tenders must be plainly marked on the outside as to contents.

Specifications may be seen and all information relative to the foregoing obtained at the offices of the Property Department, City Hall, Toronto.

The usual conditions relating to tendering as prescribed by City By-law must be strictly complied with.

The lowest or any tender not necessarily accepted.

EMERSON COATSWORTH, Mayor,
Chairman Board of Control.

City Hall, Toronto, August 20th, 1906.

CONTRACTS OPEN.

TAVISTOCK, ONT.—F. Libier is preparing for the erection of a new hotel here.

WEYBURN, SASK.—Tenders are being invited for erection of Presbyterian church.

MAPLE CREEK, SASK.—A by-law has been carried to raise $60,000 for waterworks.

GRIMSBY, ONT.—A by-law has been carried for the issue of waterworks debentures.

MELFORT, SASK.—The Agricultural Society will erect an agricultural hall here this season.

MELITA, MAN.—The Roman Catholic congregation will build a new church here this fall.

LISTOWEL, ONT.—Vandrick Bros. are preparing to erect a business block on Wallace street.

MEDICINE HAT, ALTA.—Western Canneries Limited will erect a cannery, cost about $100,000.

STAR CITY, SASK.—Tenders have been taken for erection of a two-story school building here.

OTTAWA, ONT.—The plans for the new Railway station are being prepared and work will soon begin.

TORONTO JUNCTION, ONT.—The Dominion Carriage Co. have purchased a site on Churchill ave., for a factory, to cost $60,000.

ST. BONIFACE, MAN.—Tenders have been taken for construction of bitulithic pavement on several streets.

RED DEER, ALTA.—By-laws have been carried to raise $30,000 for sewer system, and $6,000 for the hospital.

BRENDA, MAN.—The Melita-Arthur Telephone Co. have obtained permission to erect a branch of their system here.

KINISTINO, SASK.—It is reported that a departmental store will be erected on corner of Main and Kinistino avenue.

HOLMFIELD, MAN.—The Bank of Hamilton have leased the Keele block which they will have altered for office use.

CHATHAM, ONT.—Tenders have been taken for the renovation of the old market building. J. L. Wilson & Son, architects.

MOOSE JAW, SASK.—A Montreal Boot and Shoe Manufacturing Company have secured options on sites for a factory building.

MASSON, QUE.—A by-law has been carried to grant a bonus of $10,000 to L. J. B. Senez to establish a boot and shoe factory.

PETERBORO, ONT.—It has been decided to erect the new Isolation Hospital on the Bay shore, near the hospital building.

NIAGARA, ONT.—J. H. Burns will receive tenders up to August 28th for the purchase of $15,000 4½ per cent. town debentures.

PICTON, ONT.—The plans of W. Newlands, architect, Kingston, for the new Collegiate Institute building have been accepted.

NEW WESTMINISTER, B. C.—The City Council are considering plans in connection with improvements to the water system.

BRACEBRIDGE, ONT.—Tenders will be received by Moses J. Dickie, Box F, up to September 1st. for erecting of a library building.

LETHBRIDGE, ALTA.—On August 25th. a by-law will be voted on for an issue of $40,000 debentures of the Medicine Hat woolen mills.

BLAIRMORE, ALTA. — Mr. McDonald, architect, Lethbridge, is preparing plans for a sanitarium at the sulpher springs for R. Steeves.

PEMBROKE, ONT. — The tenders for erection of weave sheds for Rosamund Woolen Co., were not satisfactory. Work has been postponed for a time.

CARLETON PLACE, ONT.—The Council gives notice of its intention to construct concrete sidewalks on Charlotte street from Bridge to Moffat.

WOODSTOCK, ONT.—A by-law will be voted on September 12th. to loan $25,000 to the Canadian Bearings Company, of Hamilton, to locate here.

KAMLOOPS, B. C.—Neil F. Mackay, Deputy Commissioner of Lands and Works, Victoria, has taken tenders for erection of school-house at Fruitland.

ST. FRANCOIS XAVIER, MAN.—G. Laralles will receive tenders up to September 3rd for construction of vault at council chambers, and other work.

CALGARY, ALTA.—The C. N. R. are seeking a site from the city for station, freight shed, etc. They purpose building many branch lines from the city.

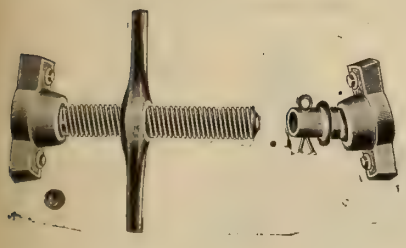
NEEPAWA, MAN.—J. W. Pattison will receive tenders up to August 24th for constructien of 12 inch tile drain on Mountain avenue, from Hamilton street to Mill street.

FORT FRANCIS, ONT. — Tenders are being taken for the erection of an

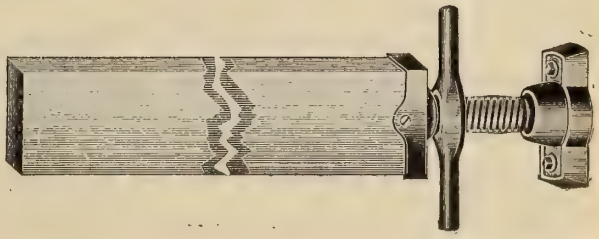
TRENCH DIGGING EQUIPMENT

"Carson" Trench Machines

do twice the work done in the ordinary way in half the time and minimize the obstruction to traffic



Trench Braces
all kinds



W.H.C. MUSSEN & CO.

Railway, Mining and Contractors' Supplies

MONTREAL

addition to the Methodist parsonage.—Mr. Haskell will erect a new residence, on Victoria street.

ORILLIA, ONT.—C.E. Grant will receive tenders up to August 22nd. for the purchase of $35,000 30 year, $45,000 30 year, and $25,000 20 year town debentures.

TILLSONBURG, ONT.—A by-law has been carried to extend waterworks system at a cost of $5,000. The by-law for street improvement cost $6,000 was defeated.

OSHAWA, ONT.—The Railway & Municipal Board have approved of a by-low to raise $20,000 debentures for extension of waterworks system. Work will soon begin.

WELLAN , ONT.—By-laws have been carried providing for the location of the Automobile factory here, and to construct macadam pavement on North Main street, cost $5,060.

HAILEYBURG, ONT.—The Construction of roads and concrete sidewalks at a cost of $15,000 is being considered.—The purchase of a site for town hall and a jail is being considered.

VERMILLION, ALTA.—Plans for the new Anglican church building are being prepared. — It is understood that O. Baker, of Baker & Sons, will build an elevator here this summer.

BROCKVILLE, ONT.—C. P. Gable, chairman Board of Works, will receive tenders up to August 23rd for construction of abutments over Sheppards Creek on the line of Brock street west.

NIAGARA FALLS, ONT. — The Canadian Niagara Power Co. have applied to the Railway and Municipal Board for approval of plans for proposed line from this town to Fort Erie.

VERNON, B.C.—The Roman Catholic congregation have purchased a site for a new church. They also purpose erecting a convent. — The Episcopal church purpose erecting a new church building.

BRANTFORD, ONT.—Building permits have been issued to W. J. Kerr for a brick dwelling on Richmond street, cost $1,300, and to T. Field for brick dwelling on Marlborough street, cost $1,200.

STRATHCONA, ALTA. — J. Wize, architect, has taken tenders for the erection of residence.—Tenders have been taken in connection with fitting up basement and installing plumbing, etc. in Grandin street school.

FORT WILLIAM, ONT.—F. Lee, Division Engineer will receive tenders up to August 22nd. for additions to coal bins and pockets for C. P. R.—C. H. Bowman, of the Great Lakes Irrigating Co. is interested in the ship building and repairing plant, to be erected, cost $50,000.

GLADSTONE, MAN.—S. Schooley will receive tenders up to September 1st for construction of a steel truss bridge (Warner truss) over the White Mud river. Plans with above named and at Public Works Department, Winnipeg.

PORT MAITLAND, ONT.—L. K. Jones, Department of Railways and Canals, Ottawa, will receive tenders up to August 28th for renewal of the east pier. Plans with Superintending Engineer of Welland canal, St. Catharines.

HEATHCOTE, ONT.—J. M. Thomson, Bognor, will receive tenders up to September 3rd. for building two concrete abutments for bridge over Beaver River. Plans with A. C. Patterson, Blantyre; Neil Coleman, Thornbury and J. Rutherford, County Clerk, Owen Sound.

OAK POINT, N. B.—F. Gelinas, Department of Public Works, Ottawa, will receive tenders up to September 10th for construction of a wharf. Plans at the Department, with postmaster here, with E. T. P. Shewen, St. John, and with G. Stead, Chatham.

AMULREE, ONT.—J. D. Fisher, Township Clerk, has taken tenders for construction of steel bridge with concrete flooring and abutments over the Avon river on side line 40 and 41, also for steel bridge and concrete flooring at Hampstead.

VICTORIA, B. C.—Hooper & Watkins, architects, have taken tenders for erection of a frame residence on Catharine street for J. Gilbert.—Pither & Leiser have taken tenders for the excavation for a new building corner Fort and Wharf street. Hooper & Watkins, architects.

SASKATOON, SASK. — Guppy & MacDougall purpose erecting a new store on Second avenue.—S. Hill & Sons are preparing to erect a new factory on Nineteenth street.—The Canadian Bank of Commerce are considering the erection of a new building, corner Second avenue and Twenty-First street.

DELORAINE, MAN.—The Delorhine Farmers' Elevator Co., purpose building a flour mill in connection with the elevator.—Tenders have been taken for erection of a brick building for the Dominion Bank. Darling & Pearson, architects, Winnipeg.

MONTREAL, QUE.—A new site, corner St. James and St. Felix streets, has been secured for the branch post office for which plans have been prepared. It is expected building will soon begin.—The Fire Committee have decided to discontinue work on No. 5 fire station until necessary funds are voted by the Council.

HAWKSHAW, N. B. —C. H. LaBillois, Department of Public Works, Fredericton, will receive tenders up to October 15th for building masonry substructures and approaches to Hawkshaw bridge over the St. John river. Plans at the Department. at office of Hon. L. J. Tweedle, Premier, Chatham, and with Hon. Wm. Pugley, St. John. Tenders will also be taken for the metal superstructure for which plans may be seen at the Department.

PORTAGE LA PRAIRIE, MAN.—A by-law has been carried to expend $50,000 in waterworks and sewage extensions.—Local capitalists have formed a company to construct a new laundry building, cost about $10,000.—Waterloo Threshing Machine Co. have selected a site for warehouse and repair shop.—The Detachable Boiler Flue Manufacturing Co. have decided to locate here.

QUEBEC, QUE. — The following building permits have been issued: T. Bureau, repairs to building on Notre Dame des Anges street; Delle. Gagnon, building on Rousseau staeet, cost $2,000; E. Parent, building on Des Grisons street cost $3,000; Cauchon & Frere, building on St. Paul street, cost $3,000; Wm. Jewell, building on Artillery and Drolet

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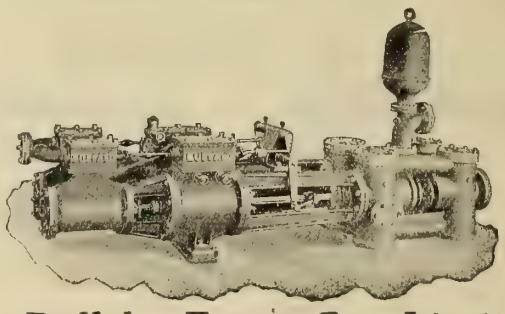

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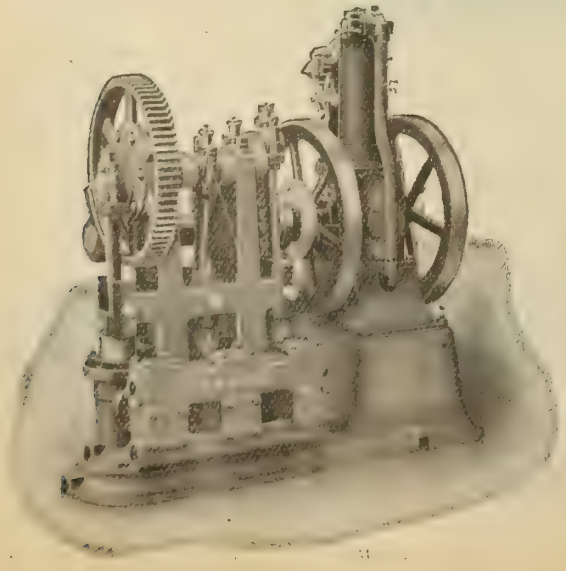

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streets, cost $2,000 ; O. Parent, construction of hangars, etc., on Laframboise street, cost $5,000; A. Fleury, building on Ste. Cecile street, cost $1,200.

KINGSTON, ONT. — New York capitalists are considering the erection of a sanitarium on one of the Thousand Islands. — Specifications for the new Biological building are being prepared. — The Government is preparing for additions and renovations to the Tete du Pont barracks, cost $100,000. — Preparations are being made for enlarging the locomotive works here.

HAMILTON, ONT.—It is expected that the new theatre promoted by C. W. Bennett, of London, will be erected in connection with the Union station at King and Hughson streets.—J. J. Holland, of Acton, has purchased the Station Hotel, Stuart street, on which he purposes making alterations.—Plans have been prepared for rebuilding front of the old armory building.

EDMONTON, ALTA. — Building permits have been issued as follows: Pickering Bros., dwelling, Sixth street, $7,000 ; Joseph Langlais. dwelling, Seventh street, $3,000 ; C. Turgeon, dwelling, Second street, $1800.—A large hotel to cost $20,000 will be erected on 1st street.—Gorman & Clancey, dealers in wholesale builders' supplies, will build a large warehouse on 4th street.

MONCTON, N. B.—L. K. Jones Department of Railways and Canals, Ottawa, will receive tenders up to August 28th. for erection of a passenger car repair shop, paint shop and store house for the I. C. R. Plans at the Department and at the office of the general manager of Government-Railways and with the superintending engineer of canals of the Province of Quebec, No. 2 Place d'Armes, Montreal.

LONDON, ONT.—Building permits have been issued as follows: H. McLean, brick veneer dwelling, Roberts avenue ; W. Gurd, two-story brick dwelling, 417 Princess avenue ; W. Pegler, dwelling, West William street; J. W. Cawrse, two-story brick residence, corner Wharncliffe road and Victoria street ; Green-Swift Company, three-story and basement warehouse, Talbot street ; A. Greer, three brick veneer dwellings, Wellington street ; H. E. Whetter, cement block residence, James street ; G. K. Campbell, two-story pressed brick dwelling, St. James street ; J. W. Clayton, one-and-a half story brick residence, Cathcart street ; Kowland Oates, a one-and-a-half story cement block residence, Eva street.—Tenders have been taken for constructing sewers in Duchess avenue and Marley place.

VANCOUVER, B.C.—It is understood that the new Bank of Commerce building to be erected corner of Granville and Hastings streets will cost $300,000.—A three-storey brick block is to be erected on Abbott street for Mrs. R. Winters.—Parr & Fee, architects, have prepared plans for a two-storey frame block, corner Granville and Smithe streets for M - Caulay & Nicolls.—Plans have been prepared for a five storey warehouse on Beatty street, cost $30,000.— Grant & Henderson, architects, have prepared plans for a brick and stone block on Pender street for Dr. N. Drier, cost $7,000.— Captain B. J. Ree will build a residence on Pandora street, cost $1,600. —P. W. Hempville will build two houses on Lansdowne avenue,—Sam Sing will erect a building on Princess street, cost $1,500.— The Vancouver Free Library building will be remodelled into an hotel building for H. G. Gissett.—The following permits have been issued : D. G. McLennan, one frame dwelling, Seymour street, $2,000 ; William Gormiley, one frame dwelling, Seymour street, $2,000 ; R. Bowman, brick warehouse, Beatty street, $15,000.

WINNIPEG, MAN. — Minister of Public Works has taken tenders for new metal roofing on the old Court House.—F. W. Drewry, Chairman of the Parks Committee will receive tenders up to August 23rd for fencing Alexander Square. — F. Gelinas, Department of Public Works, Ottawa, will receive tenders up to August 27th for the erection of forge building at Fort Osborne. Plans at the Department and with J. Greenfield, Superintendent of Public Buildings.—The Fire, Water and Light Committee will receive tenders up to September 10th for supply of 2,000 half inch water meters. They will also receive tenders

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up to August 27th for erection of warehouse, transformer house and repair shop for the electric department. Plans with Eade Bros., architects.—F. R. Evans, architect, has taken tenders for alterations and additions to residence on Rupert street for R. Robinson.—The property owners on Logan avenue have petitioned for asphalt pavement from Ellen to Nena street.—The Fire, Water and Light Committee have decided to erect three new fire halls they will also repair the fire hall, corner York and Smith streets.—The Sherwin-Williams Paint & Varnish Co. have purchased a site on Notre Dame avenue for warehouse.—Plans for the new Union station of the C. N. R. and G. T. P. R. are about completed, seven storey brick and stone building.

TORONTO, ONT. — Langley and Langley, architects, are receiving tenders for erection of Aged Women's Home, on Belmont street, brick and stone building, 4-storey and basement.— H. Simpson, architect, is preparing plans for hotel, corner Sumach and King streets, for which tenders will soon be taken.—Ellis & Connery, architects are preparing plans for a high school building at Oshawa, also for two factories at Toronto Junction, a house for F. J. Fisher and additions to buildings of Sheppard Printing Co.—Same architects are calling for tenders for erection of a residence for J. Armstrong.—Copeland & Fairbairn, real estate brokers, have sold a site on Westmoreland avenue, north of C.P.R. for two residences.—A Pennsylvania steel firm are negotiating for a site on Royce avenue, for a branch of their industry.—Tenders are invited at 675 Dufferin street for carpenter work on two houses.—The Wm. Davies Co. will erect a two-storey brick stable on Vine street, cost $20,000.—The erection of a new church for St. Anne's congregation is being considered.—Building permits have been issued as follows: John Dixon, 3-storey brick dwelling, Chestnut Park road, cost $8,-

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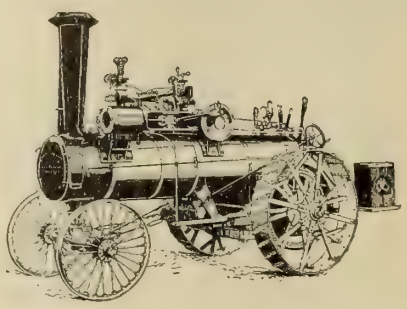
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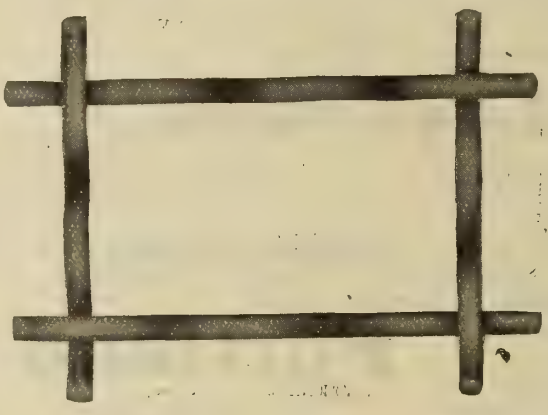
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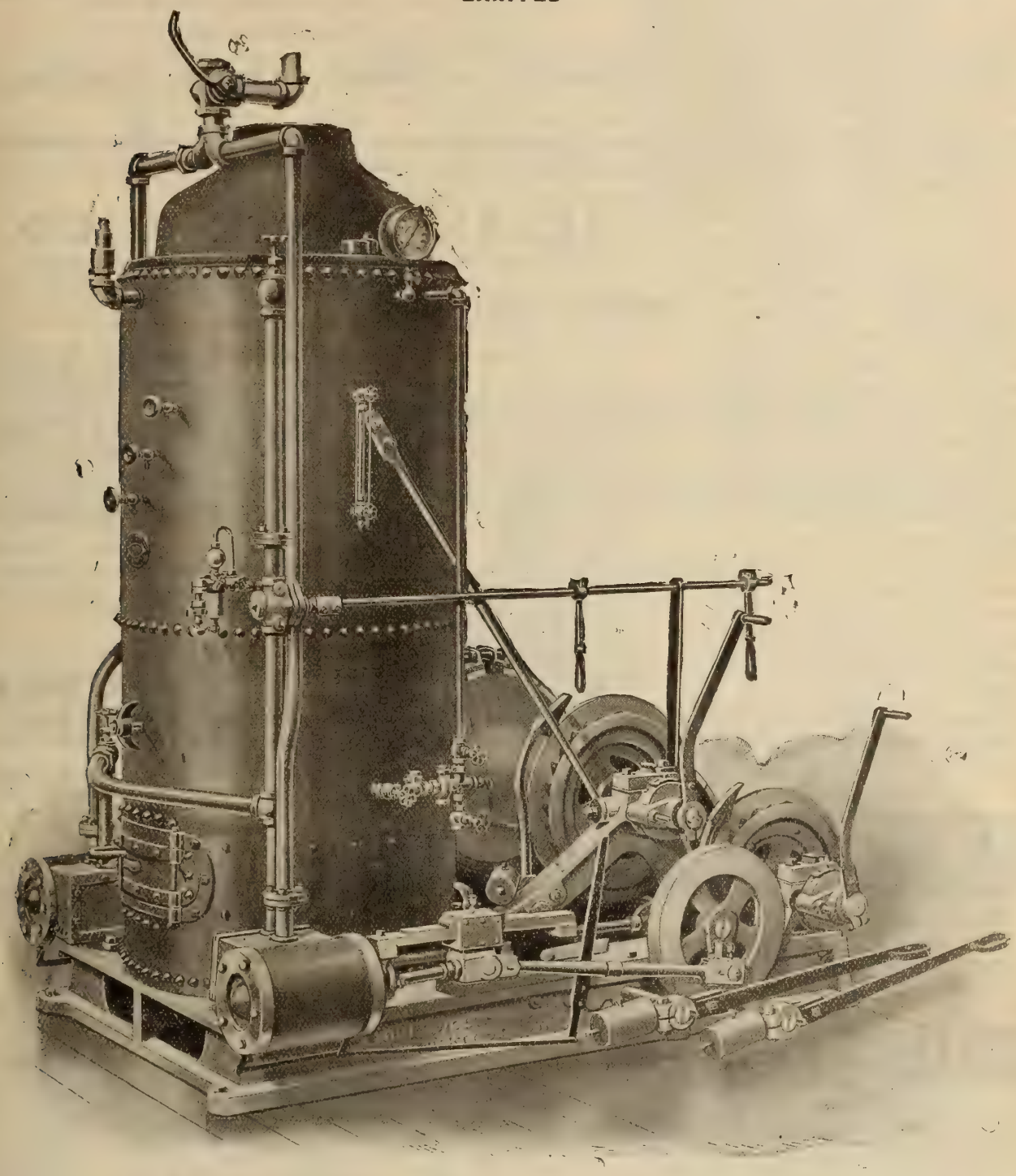

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(Continued on page 14.)

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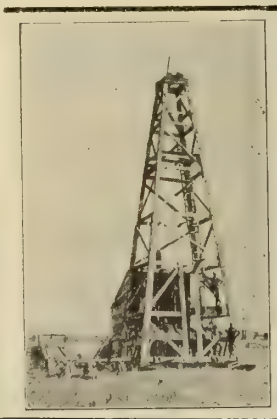

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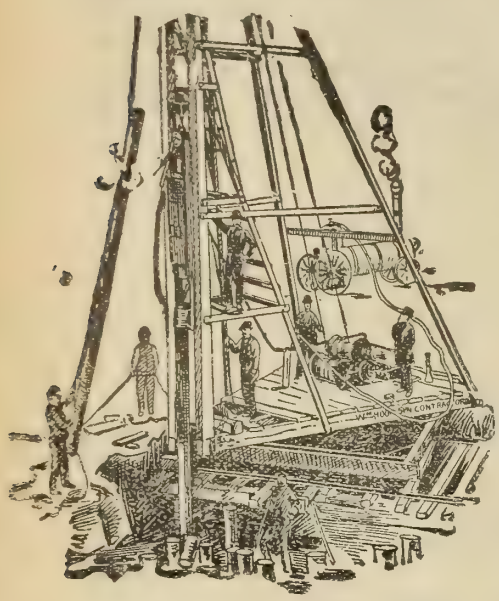

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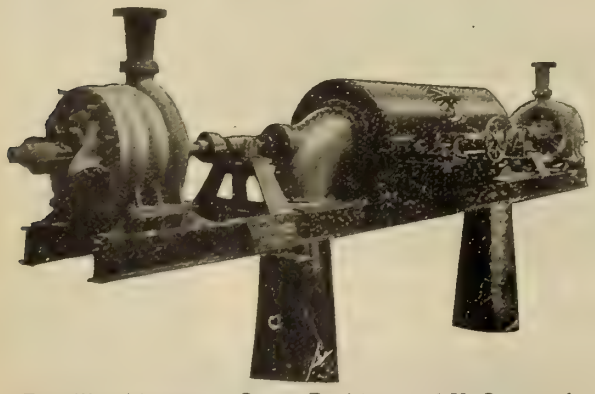

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Red No. 1	$13 00
" 2	11 50
" 3	10 00
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" 2	13 00
Brown	25 00
Roman Red	30 00
" Buff	35 00
" Brown	40 00
Hard Building	8 0
" Sewer	8 00
" Backing	7 00

Moulded and Ornamental from $2.00 to $5.00 per 100.
Terra Cotta String Courses and Frieze, from 50c. to $2.00 per ft. run.
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Nos. 1, and 2, Red Pressed Bricks
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Porous Terra Cotta Fireproofing of all Descriptions
Vitrified Street-Paving Bricks
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Common Stock Red and Grey Bricks
Sewer Bricks
Stone or Macadamized Roadways

Please write to head office, 34 Toronto St. Toronto, for catalogue and prices.

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	F.O.B. Beamsville.
Red Peerless Facing	$16 00
" No. 1	14 00
" No. 2	12 00
" No. 3	10 00
Brown Peerless Facing	20 00
" No. 1	18 00
Buff Peerless	20 00
" No. 1	18 00
" No. 2	15 00
Moulded and Ornamental Brick from $3 to $10 per C	
Roman Red (Size 12 x 4 x 1½ in.)	30 00
" Buff " "	30 00
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" " " No. 2	15 00
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1 inch No. 1 Pine cuts and better	$49.00 to	$51.00
1½ to 2 inch No. 1 cuts and better	53.00	55.00
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1½ to 2 inch No. 3 cuts and better	40.00	42.00
1 inch Pine Dressing and better shorts	24.00	26.00
1 x 4, 6 and 8 Common	20.00	21.00
1 x 10 and 12 Common.	21.00	24.00
1 inch mill run sidings	21.00	22.00
1 inch mill run	21.00	22.00
1 x 10 and 12 mill culls	17.00	18.00
1 inch dead cull sidings	12.00	13.00
1½ inch Flooring	27.00	28.00
Hemlock, 1 x 4 to 8 inch	16 00	17.00
2 x 4 to 8 inch, 12 to 16 feet	17.00	18.00
2 x 4 to 10 inch, 18 feet	18.00	19.00
1½ inch No. 1 4 ft. Pine Lath	4.50	5.00
1½ inch No. 2 4 ft. Lath	3.40	3.50
1½ inch No. 1 4 ft. Hemlock Lath		3.50
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XXX 6 butts to 2 inch		3.15
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" 1½ inch to 2	23.00	25.00
Basswood, Common and better, 1 to 1¼ inch	23.00	24 00
Basswood, 1½ to 2 inch	24.00	26.00
Elm, soft, mill run, 1 to 1½ in	23.00	24.00
Elm, rock, mill run, 1 to 1¼ in	23.00	25.00
Maple, common and better, 1 to 1½ inch	22.00	23.00
Oak red plain, 1sts and 2nds, 2 to 4 inch	44.00	46.00
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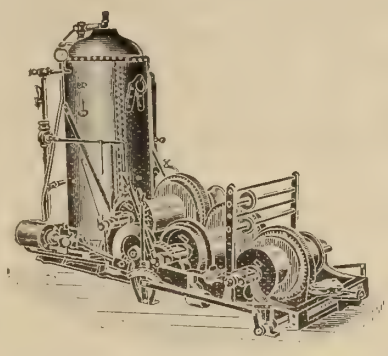

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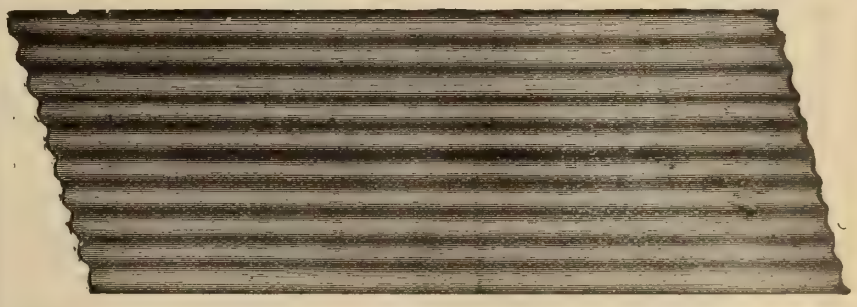

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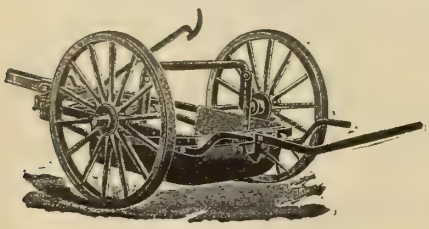

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Year.	No Samples Tested.	Soundness Faiji Test.	Specific Gravity	Residue in Test on No. 100 Sieve	Setting Time in Minutes		Tensile Strength in pounds per square inch.									
							Neat.					3 (Sand) to 1 (Cement)				
					Initial	Final	1 dy.	7 dys	28 dys.	3 mos	1 yr.	1 dy.	7 dys.	28 dys.	3 mos.	1 yr.
1903	20	O.K.	3.135	2.1	162	345	307	701	783	827	*	74	214	299	367	*
1904	44	O.K.	3.150	2.0	132	342	300	744	848	914	938	86	262	354	401	427

* Tests for 1 year were not completed when records closed. 1905 report not yet issued.

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1-storey brick and steel restaurant, 35-37 Queen strees east, $30,000.—The Ontario Cabinet will be asked to consider giving an additional $150,000 towards the new Physics Building to be erected in Queen's Park.—J. D. Farquhar, 12 King street east, is asking for tenders for all trades except brick and stone, for erection of three houses.—E. C. Whitney, Ottawa, is interested in the erection of a residence for Toronto University, for which plans have been prepared.—The G. T. R. are considering the erection of a large brick freight shed, on Wellington street, from Simcoe to John.—The Board of Control will receive tenders up to August 28th, for construction of Asphalt pavement on Ulster and Hayter streets, Mulock, Heward and Laxton avenues, also a number of concrete sidewalks and other works; also up to September 4th for slating etc., of roof of Firehall No. 8, College street.

CONTRACTS AWARDED.

LANARK, ONT.—Alterations to St. Paul's church: W. Connors, contractor.

ELGIN, MAN.—Erection of Methodist church: Israel McGrath, contractor, cost about $5,000.

MAXVILLE, ONT.—Construction of granolithic walks: Morrisburg Concrete Co., contractors.

LONDON, ONT.—Construction of sewers in Grosvenor and York streets: F. Harding, successful tenderer.

NEW WESTMINSTER, B. C.—Erection of twelve houses at Millside for Fraser River Sawmills Co., Patrick Kelly, contractor.

MONCTON, N. B.—The C. P. R. have ordered from the Kingston locomotive works two passenger locomotives for the Prince Edward Island road, cost about $13,000 each.

REGINA, SASK.—Construction of Bell

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EDMONTON ALTA. — Gorman & Clancey dealers in builders supplies, have been awarded the contract to furnish 15,000 barrels of Portland Cement to be used by the E. J. Taylor Co., in the construction of sewers here.

TORONTO, ONT.—Remodelling hotel, corner King and George streets: Carpentry, James McKenzie; brickwork, Holtby Bros.—Alterations to factory building of Lister & Co., on Stewart street: Brickwork, R. Chalkley & Son; carpentry, J. McKenzie, H. Simpson is architect for both buildings.

OTTAWA, ONT. — Construction of pavement on Elgin street, from Albert street to the Driveway, bitulithic with creosoted blocks between tracks: Warren Bituminous Paving Co., Toronto, contractors, cost $65,892.—Construction of new vaudeville theatre: E.C. Horn, New York, contractor, cost $70,000.

SASKATOON, SASK.—Ths city council have let the following contracts in connection with the waterworks system: Sewer and water pipe laying, Fry & Masterson, Moosejaw, $73,420; power house, Willoughby & Covert, Saskatoon, $21,000; water tower, Ontario Wind Engine and Pump Co., $8,200; iron water pipe and specials, Montreal Pipe Foundry Co., $30,633; hydrants and valves, R. D. Wood Co., Philadelphia, $4.000; sewer pipe, Macomb Sewer Pipe Co., Macomb Ill., $6,500; pumping machinery, Canada Foundry' Co., Toronto, $10,450.

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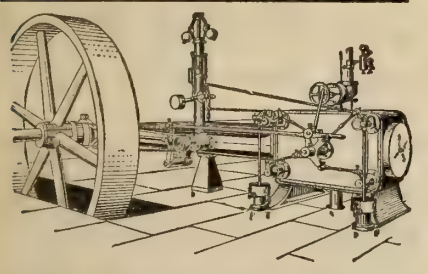

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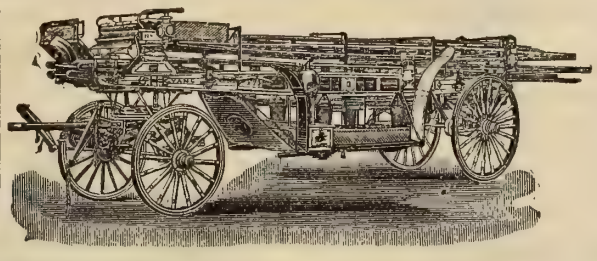

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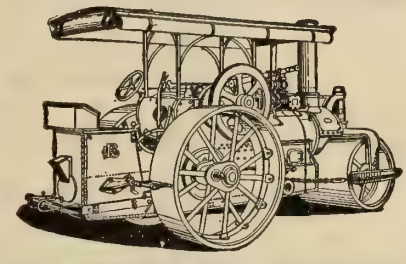

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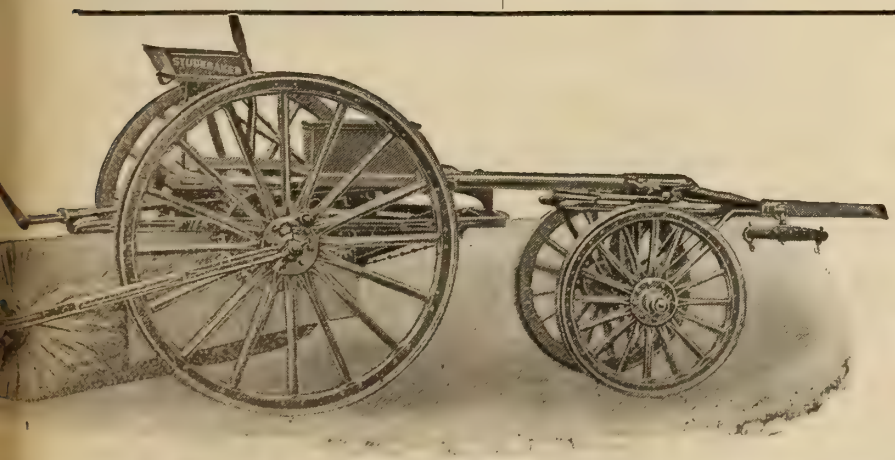

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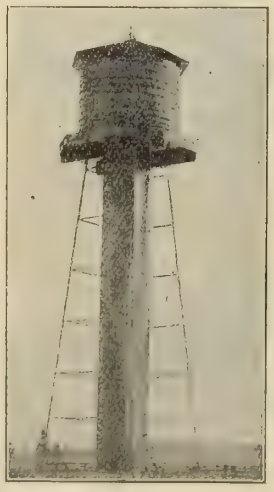

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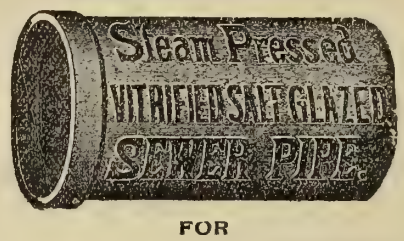

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Telegraph, Telephone or write for prices.
STINSON-REEB BUILDERS' SUPPLY CO. Limited
MONTREAL, P. Q.

REGINALD LAWSON
WESTERN REPRESENTATIVE, UNION BANK BUILDING
Phone 3397 WINNIPEG, MAN

For the Province of Saskatchewan:
REGINA STORAGE AND FORWARDING CO. — REGINA

FOUNDATION OF ROADS is the subject now under most earnest investigation by Engineers throughout the World poor foundations and good surfaces are found everywhere—result, short lived roads.
THERE IS NOT ONE FOUNDATION ON THE MARKET TO-DAY THAT PROPERLY SUPPORTS THE SURFACE. The steel rail and the wooden cross tie is always the same, but the highway is a different thing; different surfaces and different foundations are required for different services. We have these different foundations; they DO properly support the surface, and, IN OTHER WAYS, they give a life to the surface that was never before even contemplated.
The Nash Road, Borough of Brooklyn, N.Y. City, U.S.A

Brian D. McConnell
CIVIL ENGINEER
Water Works, Water Powers
Sewerage Systems, Railways
Temple Building,
Phone Main 1473 *MONTREAL*

T. A. MORRISON & CO.
204 St. James Street
MONTREAL

Stone Crushers and Grinders
Steam Road Rollers
Fire Engines, Steam and Gasoline
Concrete and Macadam Stone

J. HARVEY
CONTRACTOR
PETROLEA, ONT.
Driller of Oil, Gas, Salt or Artesian Wells. Deep Wells a Specialty.

Contracts taken in any part of Canada. Several years experience in Artesian Wells for Municipal Water Works. Estimates or geological information cheerfully furnished.
REFERENCES GIVEN

MACHINE BANDED WOOD STAVE WATER PIPE

High pressure pipe for Water Works Systems, irrigation power plants, etc. Sizes 2" to 24", half the cost of cast iron. Write for Catalogue.
PACIFIC COAST PIPE CO., LTD. Box 563, Vancouver, B. C

W. & F. P. CURRIE & CO.
345 St. James St., Montreal
Importers of
SEWER PIPES,
CULVERT PIPES, ETC.
VENT LININGS,
FLUE COVERS,
FIRE BRICKS,
FIRE CLAY,
WHITING.

PORTLAND CEMENTS,
HIGH GRADE ENGLISH
" " GERMAN
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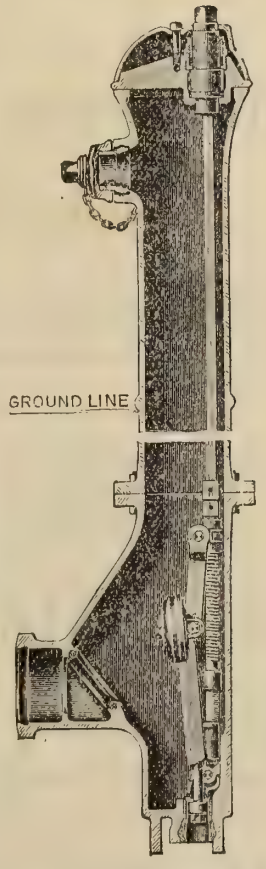
PLASTER OF PARIS
BORAX,
CHINA CLAY.



WATERWORKS SUPPLIES
HYDRANTS — VALVES
PIPE FITTINGS
STEAM PUMPS
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Specifications Respectfully Solicited.

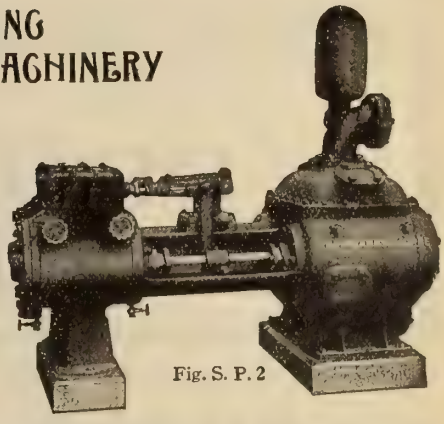


Fig. S. P. 2

The **Canadian Fairbanks Co.,** Limited
MONTREAL TORONTO WINNIPEG VANCOUVER

"RAVEN" PORTLAND CEMENT
— Unexcelled for Strength and Uniformity —
RAVEN LAKE PORTLAND CEMENT CO.
Limited
Long Distance Telephone: RAVEN LAKE, ONT. Telegraph and Post Office Address: VICTORIA ROAD, ONT

W. J. Lownds, plumber, Toronto Junction, Ont., has assigned to E. R. C. Clarkson.

H. Blais & Company, plumbers, Napierville, Que., is the name under which the business of Mrs. Henri Blais is registered.

The business of J. A. Guenard & Company, contractors, Quebec, Que., has been registered.

Advertisements in the CONTRACT RECORD bring results

THE UNITED STATES FIDELITY AND GUARANTY Co.

Acts as Sureties on
Contractors' Bids or Tenders and on Final Bonds
Rates Reasonable. See our Agent in your town or write direct to us
Head Office for Canada:
6 Colborne Street, Toronto
A. E. KIRKPATRICK, MANAGER

WE WILL BOND YOU

SIMPSON & LEWIS
Civil Engineers
Electric, Hydraulic Plants, Waterworks, Sewerage, Bridges.
33 Bank St. Chambers, OTTAWA.

THE
Matthews Fire Hydrant

Is the recognized Standard Hydrant, and is the easiest Hydrant to keep in order.

Our Hydrants are thoroughly tested before shipment, and are of substantial proportions and weight.

Have your Engineer specify "The Matthew's" and get our tender.

THE KERR ENGINE CO., LIMITED
Walkerville - Ont.

CONCRETE MIXING MACHINERY

14 Distinct types of Mixers
3 Types of Measurers and Feeders for Concrete aggregates

DERRICK BOXES - STORAGE BINS
&C., &C., &C.

SEND FOR CATALOGUES

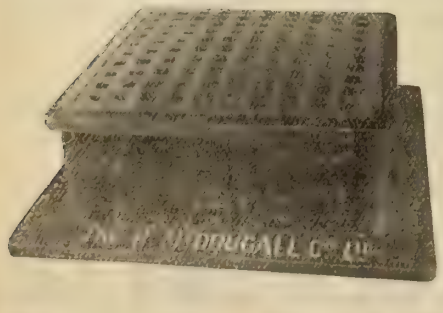
E. F. DARTNELL, MONTREAL

The British Columbia General Contract Company, Limited
Telegraphic Address: "Dredging"
Fairfield Building, VANCOUVER, B. C.

ENGINEERS and CONTRACTORS

Municipal Works and Buildings
Bridges
Concrete Construction
Harbor Works
Railways
Dredging and Reclamation

MANHOLE COVERS and FRAMES



We have several designs and this shows the article in most general use. It is Heavy and Substantial, made from good materials and will stand any strain to which it may be subjected.

Will be pleased to furnish particulars of these, together with

CATCH BASINS, HYDRANTS, CURB BOXES, ETC.

The R. McDOUGALL COMPANY, Limited,
GALT, CANADA.

Head Office and Works,
Toronto, Ont.

CAST IRON PIPE FOR WATER OR GAS

Special Castings,
Tees, Crosses, Flanges Pipe, Valves, Hydrants,
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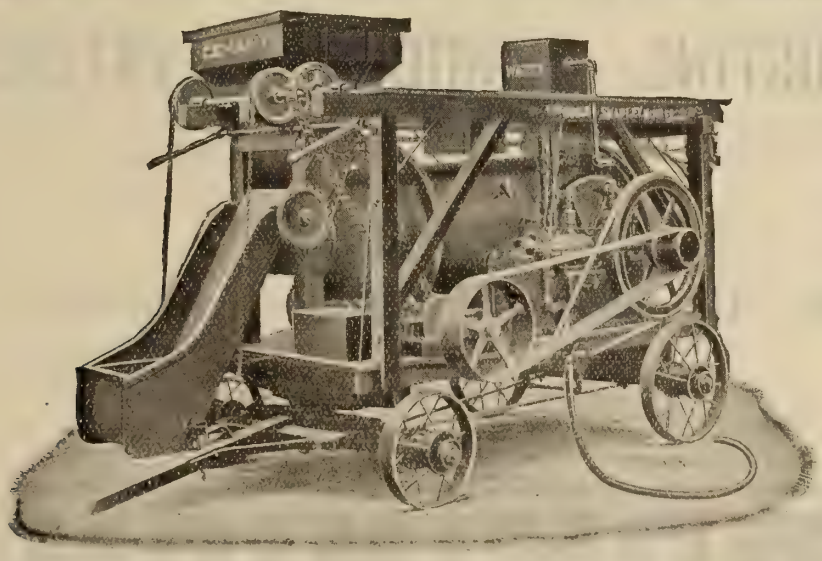
District Offices: MONTREAL, HALIFAX, OTTAWA, WINNIPEG, VANCOUVER, ROSSLAND

Ideal Automatic Concrete Mixers

The Only Successful Automatic Mixer Made



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BRANTFORD, CANADA

Cableways

For any span for

Bridge, Canal and Dam Construction

With Aerial Dump and Other Features

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FOR CABLEWAYS, TRAMWAYS, HAULAGE HOISTING, DERRICKS, ELEVATORS

Wire Ropes Manufactured for Special Applications

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Blocks, Clips, Thimbles, Turnbuckles, Shackles, Etc., Etc.

Prices on Application.

DOMINION WIRE ROPE CO LTD MONTREAL.

CANADIAN

Contract Record

A Weekly Journal of Public Works, Tenders, Advance Information and Municipal Progress

This Paper Reaches Every Week the Town and City Clerks, Town and City Engineers, County Clerks and County Engineers, Purchasers of Municipal Debentures and Leading Contractors in All Lines Throughout Canada

VOL. 17. TORONTO, MONTREAL — AUGUST 29, 1906 — WINNIPEG, VANCOUVER No. 26

THE CANADIAN CONTRACT RECORD
PUBLISHED EVERY WEDNESDAY
As an intermediate Edition of the Canadian Architect and Builder.

THE C. H. MORTIMER PUBLISHING COMPANY
of Toronto, Limited,

Subscription Price, $2 per annum, payable in advance.

CONFEDERATION LIFE BUILDING, TORONTO
Telephone Main 2362.

Branch Offices:
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720-721 Union Bank Building, Winnipeg. Telephone 1274
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WANTED

Information regarding good farm for sale with good title somewheres near Toronto. Give price and description and character of soil. Also state when possession can be had. Owners only need answer. State how far from town, and mention improvements. Address
W. C. CUNNINGHAM,
Andrus Bldg., Minneapolis, Minn.

Debentures for Sale
County of Hastings

Sealed tenders will be received by the undersigned up to noon of TUESDAY, 4TH DAY OF SEPTEMBER, 1906, for the purchase of twenty debentures of the County of Hastings aggregating $27,000, drawing 5 per cent. interest. One debenture and all interest coupons paid each year amounting to say $1,166.35. First of such payments on sixth day of August, 1907. The highest or any tender not necessarily accepted.

Further information given on application to
B. MALLORY,
Treasurer County of Hastings,
Belleville, Ont.

SALE OF DEBENTURES

Sealed bids will be received by the undersigned, the City Treasurer of the City of Fredericton New Brunswick, at his office in the City of Fredericton, until noon SEPTEMBER 15TH, 1906, for any or all of the following City Debentures issued under authority of the Acts of Assembly of New Brunswick:

$45,000 Fredericton Water Improvement Bonds bearing 4%, payable half yearly on March 15th and September 15th, principal payable $1,000 annually, beginning September 15th, 1911, and balance of $20,000 payable September 15th, 1946.

Also $15,000 Sewerage Bonds at the same rate with accrued interest from July 15th 1906, maturing July 15th, 1946. All above bonds are issued in amounts of $500 each.

The City reserves the right to reject any or all bids or to accept any bid.

I. R. GOLDING,
City Treasurer.
Fredericton N. B., August 13th, 1906.

To Architects

The undersigned solicits re-engagement as Clerk of Works or Quantity Surveyor.
W. FRASER,
142 Grace St., Toronto.

EXTENSION OF TIME

TOWN OF MOOSOMIN
Province of Saskatchewan

TENDERS FOR WATER WORKS

Sealed tenders addressed to the Secretary-Treasurer of the town of Moosomin, Sask., will be received until 7.15 p m. on

THURSDAY, SEPTEMBER 20TH, 1906,

for the following subdivisions of the proposed works:

Contract "A"—Trenching, Pipelaying, etc., for 6,000 feet of water mains and 2,600 feet of storm sewers.
Contract "B"—Pump House.
Contract "C"—Steel Water Tower.
Contract "D"—Pipes and Specials.
Contract "E"—Valves and Fire Hydrants.
Contract "F"—Sewer Pipes.
Contract "G"—Fire Pump and Gasoline Engines.

Plans and specifications will be ready for inspection and may be seen at the office of the Chief Engineer, 103 Bay street, Toronto, Ont., or at the office of the Secretary-Treasurer, Moosomin, Sask., about August 2 st, 1906.

No tender necessarily accepted.

A. WHYTE, Esq., Mayor, Moosomin, Sask.
JOHN SMITHERS, Esq., Secretary-Treasurer, Moosomin, Sask.
WILLIS CHIPMAN, C.E.
Chief Engineer,
103 Bay Street,
Toronto, Ont.

Tenders for Supply of WATER METERS

Sealed tenders addressed to Ald. J. C. Gibson, Chairman of the Fire, Water and Light Committee, for the supply of 2,000 one-half inch water meters for the city waterworks will be received at the office of the undersigned up to 2.30 p.m. on

MONDAY, SEPTEMBER 10TH, 1906,

Specifications and forms of tender may be obtained at the office of H. N. Ruttan, City Engineer, Winnipeg, Canada.

Each tender must be accompanied by an accepted cheque or draft payable to the order of the City Treasurer, or cash deposit, for the sum called for in the form of tender supplied, which will subject to forfeiture in case of failure on the part of the contractor to enter into a written contract with approved sureties if called upon to do so.

The city reserves the right to reject any or all tenders or to accept any bid which appears advantageous to the city of Winnipeg.

C. J. BROWN,
City Clerk.
City Clerk's Office.
Winnipeg, August 16, 1906.

Wanted

Able energetic superintendent for architect; executive ability; one who can push work intelligently and use necessary foresight to this end. Apply to Box 85, CONTRACT RECORD.

Debentures For Sale

Sealed tenders will be received up to noon of MONDAY, SEPTEMBER 3RD, 1906, for the purchase of $30,000 Water Works Debentures of the Town of Oshawa dated August 13th, 1906, bearing interest at 4½ per cent. per annum, and repayable at the office of the Treasurer, Oshawa, in 30 equal annual installments of principal and interest. The highest or any tender not necessarily accepted.

THOS. MORRIS,
Town Clerk.

CITY OF GUELPH

TO CONTRACTORS

Sealed tenders marked "Tender for Cement Walks", will be received by the undersigned up to 31ST INSTANT for the laying of from 8,000 to 10,000 feet of cement walk in accordance with specifications to be seen at the office of the City Engineer.

The lowest or any tender not necessarily accepted.

RICHARD MITCHELL,
City Clerk.

City of Moose Jaw, Saskatchewan

TENDERS FOR WATERWORKS CONSTRUCTION

Sealed tenders will be received by the undersigned up to MONDAY, SEPTEMBER 17TH, 1906, at 5 o'clock p. m., for the undermentioned contracts, plans and specifications of which can be seen at the office of the City Engineer. The Council reserves to itself the right to reject any or all tenders. A marked cheque of 5%, payable to the Secretary-Treasurer at Moose Jaw, is to accompany each tender.

CONTRACT A

Labour and certain materials in connection with installing a gravity water supply consisting of 11,980 lineal feet 12" wood stave water main; 29,715 lineal feet 10" wood stave water main, and 650 feet 15" tile gallary, with all necessary valves and fittings, more or less.

CONTRACT B

For the construction of a Concrete Dam with earth embankment at the Snowdy Springs, eight miles south west of the city and a concrete lining to one side of basin.

CONTRACT C

For cleaning off the top soil at Snowdy Springs to a depth of five feet more or less.

CONTRACT D

For the construction of a Re-inforced Steel Concrete Storage Reservoir adjoining the City Power House.

JOHN D. SIMPSON,
Secretary-Treasurer,
Moose Jaw, Sask.

[FOR ADDITIONAL ADVERTISEMENTS FOR TENDERS SEE NEXT PAGE.]

WANTED

Position as Engineer to small Town, or as Assistant to City, Town or County Engineer. 7½ years similar experience, any part. Box 86, CONTRACT RECORD, Toronto.

Sealed Tenders

will be received up to SEPTEMBER 1ST, NOON, 1906, for the erection and completion of a Public Library building, in whole or in parts, in the Town of Bracebridge. A marked cheque for 10 per cent. of the amount of tender must accompany each tender as a guarantee of good faith and will be returned to each unsuccessful tenderer as soon as contract is signed. Lowest or any tender not necessarily accepted. Plans and further particulars on application to the secretary of Library Board, Box F, Bracebridge, Ont.

MOSES J. DICKIE,
Secretary.

CONTRACTS OPEN.

SASKATOON, SASK.—The citizens have decided to build a hospital.

PRESTON, ONT.—Dr. Ochs is preparing to build a fine residence.

SHOAL LAKE, MAN.—The Council will purchase a chemical fire engine.

BERLIN, ONT.—The Western Shoe Co., capital $40,000, will build a factory here.

EAST TORONTO, ONT. — The Toronto Type Foundry Co. intend building here.

TILSONBURG, ONT.—A by-law has been carried providing $5,000 for waterworks.

MEAFORD, ONT.—The question of constructing a sewerage system is under consideration.

PETERBORO, ONT. — G. Walter Green intends building two residences on Cedar street.

SYDNEY, N. S.—The Council are considering the building of a bridge over Wentworth creek.

PARIS, ONT.—The Grand Valley Railway Co. will build a stone or cement block passenger station here.

MORRIS, MAN. — On September 10th the ratepayers will vote on a by-law to provide $7,000 for a gas plant.

INGLIS FALLS, ONT.—R. G. Little is this week taking tenders for repairing the dam at the electric light power house.

LADYSMITH, B. C.—The by-law to borrow $35,000 for installing an electric light plant was defeated on the 11th inst.

ATWOOD, ONT.—T. G. Ratcliffe, Township Clerk, wants tenders by 15th inst. for reconstruction of the Nicholson drain.

THAMESVILLE, ONT.—The waterworks by-law was voted on Monday last. Result not learned at time of going to press.

KENORA, ONT.—Voting on the by-law to provide $200,000 for a municipal water power development is taking place to-day.

KAMLOOPS, B. C.—The Council intend to construct a modern sewerage system and are investigating septic tanks.

STRATHCONA, ALTA.—W.H. Martin & Co. have been appointed architects for the completion of the Grandin street school.

WALLACEBURG, ONT.—Contracts are shortly to be let for a new public library, red brick and Roman stone, cost $10,000.

PRESTON, ONT. — By-laws were carried here on Monday last to establish waterworks and sewerage systems costing $73,000.

POWASSAN, ONT.—The ratepayers will vote on a by-law September 1st to raise $2,000 by debentures for erection of town hall.

SOURIS, MAN.—Bids for purchase of $3,500 5 per cent. debentures will be received by J. W. Breakey up to September 29th.

OAK POINT, N. B.—Tenders for construction of wharf here close at the Department of Public Works, Ottawa, September 10th.

CHARLOTTETOWN, P. E. I.—Tenders are invited up to September 4th for construction of car shop here for Intercolonial Railway.

NORTH BAY, ONT.—Dr. Bell, of Toronto, intends erecting a fine residence here.—The $10,000 public school debentures have not been sold.

STURGEON FALLS, ONT.—A by-law was carried here last week to bonus the Northern Ontario Smelting & Refining Co. to establish a smelter.

PORT HOPE, ONT.—Engineers for the Northumberland-Durham Power Co. are making surveys of Healey Falls for the development of electric power.

WELLAND, ONT.—Tenders for construction of main sewer will be received by R. Cooper, Chairman Streets & Sidewalks Committee, up to September 4th.

WOODSTOCK, ONT.—A by-law to loan $25,000 to Canadian Bearings, Limited, to establish a factory here will be submitted to the ratepayers September 12th.

PORT ARTHUR, ONT.—Thomas Hanley, architect, is taking tenders up to Sept. 3rd for erection of a Baptist church. Plans at store of I. L. Matthews.

NORTH VANCOUVER, B. C.—By-laws were carried last week to raise $25,000 for waterworks purposes and $50,000 for improvements in the town site.

GEORGETOWN, ONT. — R. W. King has sold the old foundry to a gentleman who intends converting it into a factory for the manufacture of canners' supplies.

WIARTON, ONT.—Bids for construction of septic tank will be received by W. J. Ferguson, Town Clerk, up to September 3rd. Plans by R. McDowall, C. E., Owen Sound.

PARRY SOUND, ONT.—It is said that the C. P. R. will build a line of railway from this place to North Bay.—The Canadian Bank of Commerce will build a fine bank on the old Seguin House lot

BOGNOR, ONT.—J. M. Thomson will receive tenders up to September 3rd for building two concrete abutments for a bridge over Beaver river at Heathcote. Plans by R. McDowall, C. E.

REGINA, SASK.—Bids wanted by J. K. Hunter, City Clerk, by September 15th for purchase of the following debentures: $130,000 waterworks; $50,000 sewerage; $180,000 local improvements.

ST. MARY'S, ONT.—A. E. Welch has submitted a proposition to the Town Council to construct an elecric railway between this place and London. He asks the town to purchase $40,000 of stock.

REGINA, SASK.—John Woodman, C.E., Winnipeg, has been retained by the Board of Trade to prepare plans for a Union station.—The Council will ask for tenders for construction of a storehouse 100 x 62 feet.

MOOSOMIN, SASK.—A by-law will likely be submitted to the ratepayers providing for the issue of $25,000 of debentures for construction of waterworks system, $5,000 for town hall, and a smaller sum for granolithic walks.

KENTVILLE, N. S.—Tenders are invited by J. Carroll, Town Clerk, up to September 1st, for furnishing material and constructing a system of sewerage, also separate tenders for furnishing the following sewer pipe: 425 ft. 18 inch; 365 ft. 15 inch; 300 ft. 9 inch; 600 ft. 12 inch; 750 ft. 20 inch; 675 ft. 24 inch; also for supply of cement.

NIAGARA FALLS, ONT.—E. D. Pitt, architect, will probably let contracts this week for new buildings for the Ramapo Co. — Charles F. Townshend has bought property on Bridge street on which to build a residence.

LETHBRIDGE, ALTA.—The ratepayers have approved of by-laws granting exemption from taxation to a flour mill, guaranteeing bonds for a woollen mill, and ratifying the agreement with the Electric Light Co. to bore for gas.

WATERLOO, ONT.—The ratepayers have sanctioned the following by-laws: $5,000 for a third storage tank and additional waterworks improvements; $3,000 for park improvements; $10,000 loan to Interior Hardwood Furnishing Co.

QU'APPELLE, SASK.—J. R. North is about to build a two-story and basement brick business block.—The ratepayers will vote on a by-law to grant a franchise to the Moore Milling Co. to install an electric light plant for the town.

CENTREVILLE, ONT. — E. F. Hinch, Clerk Township of Camden, wants tenders by September 15 for constructing a steel bridge over the Salmon river, also for moving the east pier back 15 feet and building a 12 ft. wing wall.

LONDON, ONT.—The Grand Trunk Railway propose to make improvements in South London, including the rebuilding of the Cove bridge.—Engineer Moore has submitted to the City Council a report on the available water supply between Springbank and Kilworth.

BRANTFORD, ONT.—The Waterous Engine Works Co. will build a large addition to their main shop.—T. Harry Jones, City Engineer, is taking tenders up to 30th inst. for construction of macadam pavement on Lorne street and about 2,500 lineal feet of concrete kerb.

PORT COLBORNE, ONT.—A by-law granting a fixed assessment to the Great Lakes Portland Cement Co. was carried on the 23rd inst.—A. C. Cross is asking for tenders up to September 6th for erection of a residence on Clarence street, two stories and basement, of concrete and brick.

BATTLEFORD, SASK.—The ratepayers have almost unanimously decided in favor of a waterworks system, cost $30,000, including provision for a building of sufficient size for an electric light plant. The water will be obtained from the Saskatchewan river. A system of sewerage will likely be installed later.

NEW WESTMINSTER, B. C.—It is understood that the project of the British Columbia Electric Railway Company to build an electric railway from this city to Chilliwack has been postponed until next year.—F. J. Hart & Co. are taking tenders for addition to Mahon block.

GALT, ONT.—Joseph Rigley, Township Clerk of North Dumfries, wants bids by September 8th for roadway construction, including 1,500 cubic yards of excavation.—The Bell Telephone Co. will remodel their system here next year.—Tenders will be invited for heating the fire hall.

PRINCE ALBERT, SASK.—A by-law will likely be submitted to the ratepayers to grant $25,000 towards a railway and traffic bridge across the Saskatchewan river, to be built by the Canadian Northern Railway.—The directors of the Prince Albert & Hudson's Bay Railway have decided to begin the preliminary survey at once.

HAMILTON, ONT.—A by-law will likely be submitted to the ratepayers next January to raise $30,000 to build a Home

Second-Hand Plant

IMMEDIATE SALE

378 2 No. 25 Beatty Hoisting Engines, shop Nos. 467 and 468, with No. 2 swingers, 12 ft. turn table rims.
379 suspensions rods, leading sheaves, straps, pins and bolts.
380 1 No. 27 Beatty Hoisting Engine, shop No. 470, with 3 drums to operate clam and No. 2 swinger, 12 ft. turn table rim, suspension rods, leading sheaves, etc.
394 2 6½ in. x 8 in. Marsh & Henthorn Double Cylinder,
395 Double Drum Hoisting Engine and Boilers complete with swingers.
407 2 Beatty Hoists, 3 drum No. 25.
408 1 Boiler, 25 h.p.
409 1 Boiler Upright and 1 Stack.
410 1 Engine.
396 1 No. 2½ Smith Concrete Mixer on truck with engine and boiler.
389 1 No. 2½ Smith Concrete Mixer, shop No. M723, on truck with boiler and engine.
399 1 No. 2 Ransome Concrete Mixer complete with 30 x 84 boiler and 6 x 6 engine mounted on wooden frame and wheels, and automatic water tank feed and discharge chute and poles.
402 1 No. 2 Ransome Concrete Mixer equipped with 6 x 6 engine and 30 x 84 boiler, mounted on wooden frame and wheels complete with automatic water tank feed and discharge chute and pole.
390 5 ¾ yd. Cyclopean Concrete Buckets, hand trip, with chain bail.
384 1 30 H.P. 11 x 10 Engine, driving pulley 52 x 15.
1 40 H.P. Locomotive Boiler, No. B, with usual castings and fittings, including injector and 40 ft. of 18 in. ga. stack, boiler placed on skids.
1 No. 4 Champion Steel Frame Crusher on skids having manganese steel dies.
1 14 ft. Elevator with driving connections.
1 Chute Screen with 1 in. perforated holes.
100 ft. of 4 ply, 8 in. Rubber Belting.
1 set Manganese Steel Dies for No. 4 Crusher.
401 6 Dump Cars.
6 Dump Cars, and 3 pairs wheels and axles.
10 Dump Cars.
404 6 Cars.
382 6 Steel Skips, 4 ft. x 5 ft.
3 sets of Chains with roosters.
382 6 Steel Skips, 4 ft. x 5 ft.
382 6 Steel Skips, 4 ft. x 5 ft.
382 6 Steel Skips, 4 ft. x 5 ft.
2 sets of Chains with roosters.
400 4 Holland Lights.
406 2 No. 3 Wells Lights complete.
2 No. 3 Wells Lights complete.
391 1 Cement Tester, No. 3184.
386 1 8 in. Ericson Hot Engine No. 16672, 1½ in. pump, fittings, etc.
387 1 Blake Duplex Steam Pump, 4½ x 2¾ x 4, No. 123482-3.
388 1 Albert Force Hand Pump and Fittings.
405 1 6 x 5 x 7 Brass Fitted Duplex Pump.
385 2 No. L. G. Drills, fitted for steam.
393 1 No. 5 Horizontal Centrifugal Pump complete with fittings.
2 Tripods complete.
3 No. 2 L. G. Drills, fitted for steam.
3 No. 3 Tripods complete with weights.
381 3 sets of No. 2 Beatty Guy Derrick Irons with new pattern shoes, including extra pieces for one set of irons to use third rope.
383 2 sets No. 3 Beatty Stiff Leg Derrick Irons with new pattern M & B shoes, and No. 2 top leg straps, comprising 2 M & B shoes 10 in. inside,
2 Steps with 2 Parallel Sheaves.
2 Gudgeons.
2 Mast Bands.
2 Mast Bands with one link.
2 Mast Brackets with two 12 in. sheaves.
2 Boom Bands with two links.
2 Sheave Blocks with eye hook and overhaul weight.
2 Sheave Blocks without hook.
2 Sheave Blocks without hook with becket.
4 No. 2 Top Leg Straps 6 in. and 1½ in. x 16 bolts.
4 Bottom Leg Straps 5 in. x 1 in. and 12 bolts.
4 Bottom Leg Strap, Pins and Washers.
2 12 in. x ⅝ in. Sheaves.
2 Sheave Pins 1¼ in. x 12 in.
8 ⅝ in. Rope Clips, 4⅝ in. Thimbles.
2 sets No. 3 Beatty Stiff Leg Derrick Irons with new pattern mast and boom shoes, comprising 2 mast and boom shoes 10 in. inside,
2 Steps Parallel Sheaves.
2 Gudgeons.
2 Mast Bands.
2 Mast Bands, 1 link.
2 Mast Brackets, 2 sheaves.
2 Boom Bands, 2 links.
2 Sheave Blocks, eye hook, overhaul weight.
2 Sheave Blocks, no hook.
2 Sheave blocks, no hook, with becket.
4 Top Leg Straps 5 in. x 1¼ in. 16 bolts.
4 Bottom Straps 5 in. x 1 in. 12 bolts.
4 Bottom Straps pins and washers.
2 12 in. x ⅝ in. Sheaves.
8 ⅝ in. Wire Rope Clips.
1000 ft. ⅝ in. x 19 Crucible Cast Steel Rope.
500 ft. ½ in. x 19 Crucible Cast Steel Rope.
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403 1 Royal Western Chief Blower.
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for Incurables.—The City will likely construct a bridge at Emerald street.—E. D. Cahill will build five residences on Sanford avenue, and three on Madison avenue., cost $14,000; Stewart McPhie, architect.

PORTAGE LA PRAIRIE, MAN.—The Bell Telephone Co. have purchased property on Campbell street on which to erect a new building. — The Waterloo Manufacturing Co. will build a large storehouse and factory here.—The Detachable Boiler Flue Co., in which J. M. Cozier is interested, will build a factory here.

VICTORIA, B.C.—Two waterworks schemes will probably be submitted to the ratepayers, one proposed by the Mayor and costing about $300,000, and the other proposed by the Water Committee, and costing approximately $167,000. — It is understood that Fred Pemberton has had plans prepared for a new office building on Broad street, to cost $17,000.

QUEBEC, QUE. — L. A. Auger, architect, has prepared plans for extensive alterations and improvements to the head office of the Nationale Bank of Quebec. —Cox & Amos, architects, Montreal, are the architects for the Union Bank improvements.—Under the management of the Deleware & Hudson Railway Co., the Quebec Southern & South Shore Railways will be extended. Fifty lines will be built this fall and early next spring the line will be extended to Quebec.

MONCTON, N. B.—D. Pottinger, manager Intercolonial Railway, wants tenders by September 3rd for steel superstructure of bridge at Doaktown, steel superstructure and masonry substructure of bridge at Boiestown, and superstructure of bridge at Boyer River, Que., also up to September 8th for excavating and grading for new tracks between North street station and the grain elevator at Halifax, N. S.

OTTAWA, ONT.—Plans have been prepared in the Public Works Department for an addition to the Supreme Court building.—Ald. James Davidson and A. E. Dyment, M.P., will erect a $60,000 apartment house on Sparks street.—P. Shearson Gregory, architect, is this week taking tenders on addition to 73 Rideau street.—F. Gelinas, Secretary Department of Public Works, Ottawa, desires tenders by September 11th for construction of an addition to the Supreme Court Library.

FREDERICTON, N. B.—Provincial engineers recently inspected several bridges, and as a result the Sawmill Creek and Hamilton Creek bridges are likely to be rebuilt.—The city is offering debentures for sale. Bids received by I. R. Golding, City Treasurer, up to September 10th.—Tenders are requested by C. H. LaBillois, Commissioner of Public Works, up to September 3rd for rebuilding Milton bridge in parish of Sackville, Westmorland county. Plans at the Department and at office of A. B. Pott, M. P. P., Sackville.

EDMONTON, ALTA. — Alderman Smith and R. Driscoll intend building a brick block on property recently purchased on Rice street.—H. A. Magoon, architect, has prepared plans for a new Y.M.C.A building at corner of Howard and May streets.—Plans have been received here for the new building on Jasper avenue for the Credit-Foncier Co. It will be three-stories, solid brick walls, with concrete and stone finish and hot water heating.—By-laws were carried here last week as follows: $46,000 for parks, exhibition grounds, etc.; $12,000 to purchase road and ditching machinery; $65,400 to install a new telephone system; $11,500 additional for Isolation hospital.

MONTREAL, QUE.—It is probable that the Canadian Pacific Railway will shortly call for tenders for renewal of 48 bridges on the main line between this city and Quebec, to be entirely of steel. —It is understood that the Bell Telephone Co. intend building a new exchange in the north end of the city.—Morgan & Co. will build an automobile and general warehouse in the vicinity of Beaver Hall Hill, at cost of $55,000.—A large addition will be built to the Place Vigers Hotel at the close of the present season.—The Canadian Rubber Co. have decided on extensive improvements, including the erection of new buildings. —It is understood that the promoters of the Vaudeville theatre on corner of St. Catherine and City Councillors street will erect an entirely new building, of pressed brick and concrete, cost $70,000. —The building permits granted in this city up to August 23rd represented a valuation of $5,782,323.

VANCOUVER, B.C.—McLean Bros. are about to build a saw mill near the mouth of the Fraser river.—The British Columbia Powder Co. intend building a powder mill on the west side of the North Arm of the inlet. Plans for the mechanical equipment are now being prepared.—Plans are understood to have been finally accepted for the court house to be built in this city, at estimated cost of $250,000. F. M. Rattenbury is the architect, while Dalton & Eveleigh will superintend the work of construction.—The City Council have decided to submit a by-law to the ratepayers to provide $35,000 for the purpose of a site for an incinerator.—The Council will also ask the approval of the Department of Marine & Fisheries of a plan for the improvement of the upper end of False Creek.—Sawyer & Yale have returned to this city after an inspection of the lands of the Orient Power & Pulp Co., and state that Mr. Hardy, the engineer, has taken the necessary levels for making the plans for the mill as well as for the development of the water power.

WINNIPEG, MAN. — Eade Bros., architects, have prepared plans for the new sub-station to be built by the City. It will be of brick and stone, with reinforced concrete floors and steel beams.—The City Clerk desires tenders by September 10th for supply of 2,000 one-half inch water meters.—It is reported that the C.P.R. have definitely decided to build a summer hotel at the Beach.—It is understood that plans will be prepared immediately for the new Collegiate Institute.—The Canadian Northern Railway are said to have decided on Fort Rouge as the site for their new shops.—Ridgley Lodge I.O.O.F. have purchased land on Tache street on which to build a hall.—The Fire, Water & Light Committee will this week make an examination of Potter's Springs as a probable source of water supply.—The Gurney Foundry Co., of Toronto, have purchased land on Lombard street, this city, on which to build a warehouse, five stories, cost $50,000.—G. A. Tester, architect, is

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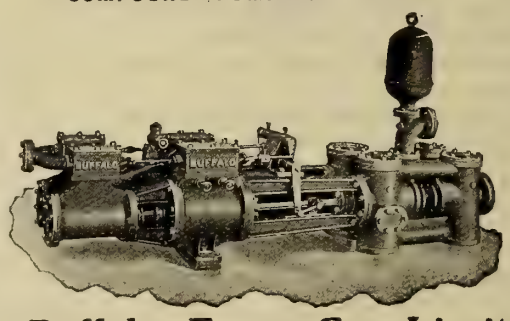

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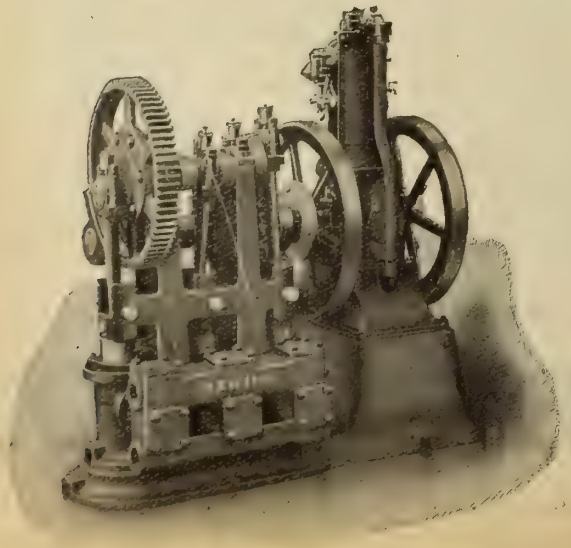

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this week taking tenders on erection of frame residence on stone foundation on Ethelbert street for J. Gowler.—It is believed that the new Union Depot of the Canadian Northern & Grand Trunk Pacific Railways will be built on the Broadway site. The plans have already been prepared for final approval.—V. W. Horwood, architect, is taking tenders for hot water heating, plumbing, galvanized iron work, electric light wiring and painting and glazing for a residence to be built on Balmoral street for J. J. Wallace. —J. H. Cadham, architect, desires tenders by September 1st for erection of brick and stone warehouse for the Frost & Wood Co.—C. J. Brown, City Clerk, will receive tenders up to September 1st for supply of 1,000,000 to 2,000,000 feet of lumber.

TORONTO, ONT.—John S. Fielding, C. E., has extended the time for tenders for water wheels, generators and transmission line for the Delhi Light & Power Co. to September 3rd.—J. Berridge & Co. wants tenders for roofing and galvanized iron work of ten houses, corner of Beverley and St. Patrick streets.—The Board of Control are asking for tenders up to September 18.h for construction of steel foot bridge and stairways across the railway tracks at Wallace avenue, also up to September 5th for construction of asphalt pavement on Bloor street, from Lansdowne avenue to Dundas street, and concrete walk on east side of St. Helen's, from Bloor to Dundas streets. — Chadwick & Beckett, architects, have just taken tenders for erection of a building on Booth avenue for the Dunlop Rubber Co.—Thomas Ogilvie & Sons have purchased the property at the south-east corner of Bay and Wellington streets and will build a fine warehouse thereon.—It is reported that the Bell Telephone Co. will build a new exchange in the northwest part of the city. —Building permits have been issued as follows: Wm. McMillan, 2 stores and dwellings, Queen street, near Elm Grove avenue, cost $8,000; John McLeod, 2½-story brick dwelling, Roxborough street west, near Yonge, cost $9,500; C. Ayre, 2-story and attic brick dwelling, corner Queen street and Morley avenue, cost $3,500; Leon Grafton, pair 2½-storey brick dwellings, Rathnally avenue, cost $6,000; C. Coulter, four 2-story brick dwellings, Beatrice street, cost $9,000; James Taylor, 2-story and attic brick dwelling, 101 Euclid avenue, cost $2,500; Andrew McLean, 1-story brick store, Bloor street near Dovercourt road, cost $2,7000; John Winnett, 2-story brick work shop, McFarlane Lane, near Queen street, cost $2,000; Mr. Dale, 2-story detached brick dwelling, Montrose avenue, near College street, cost $4,500; A. J. Peters, 1-story brick addition to bakery, 104 and 106 Augusta avenue, cost $2,000; Wm. Davies Co., 3-story concrete and brick stable, corner Null and Vine streets, cost $20,000; Austrian Jewish Congregation, 1-story brick synagogue, Teraulay street, near Agnes, cost $18,000; Sisters of St. Joseph, 3-story brick Infants Home, Sackville street, near King, cost $4,600; the Toronto Plaster Co., 2-storey wood and iron factory, Brock avenue, near Florence street, cost $2,000; Frank Watts, 2-storey and attic brick dwelling, Macdonnell avenue, near Queen street, cost $3,500; George Puddy, 2-story brick dwelling, Gerrard street, near Pembroke, cost $5,000. — The Temiskaming & Northern Ontario Railway Commission are about to ask for tenders for constructing three new branch lines, one from Cobalt through the Gillies limit, five miles; another from Englehart to foot of Long Lake, seven miles; another from Haileybury to Lake Temiskaming.—Tenders will be received by the Board of Control up to September 11th for following trades for erection of freight shed on the harbor square: Piling; concrete piers; carpenter, etc.; painter and glazier; slater, etc.; plumbing. Plans at the office of the City Architect.

CONTRACTS AWARDED.

PORT ARTHUR, ONT. — Heating Ward 3 school: Marshall & Sime, contractors.

EDMONTON, ALTA.—Residence for J. S. Smith: J. J. McKay, contractor, $4,500.

STRATHCONA, ALTA.—New Pres-

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byterian church: Thomas Richard, contractor, $22,625.

SPRINGHILL, N.S.—Erection of town hall: McLellan Bros., successful tenderers, $10,990.

REGINA, SASK.—Electric light machinery: Canadian Westinghouse Co., Hamilton, successful tenderers.

VICTORIA, B.C.—Residence on Rockland avenue for S. J. Pitts: S. Maclure, architect; George Calder, contractor.

PORT COLBORNE, ONT. — Grain elevator for Dominion Government: P. Lyall & Sons, Montreal, contractors.

CARMAN, MAN.—Methodist church: Elliott & Gardhouse, contractors, cost $25,000. W. Fingland, Winnipeg, architect.

MATTAWA, ONT.—Superstructure of steel bridge at confluence of Mattawa and Ottawa rivers: Dickson Bros., Campbellford, contractors.

PETERBORO, ONT. — Addition to works of Canadian General Electric Co.: Dominion Engineering & ConstructionCo., Montreal, contractors.

ST. STEPHEN, N. B.—Erection of pumping station for water supply: E. M. Nesbitt and E. B. Hanson, successful tenderers, cost $9,785.

MONTREAL, QUE.—Academy for the Sisters of the Congregation of Notre Dame on Fullum street: Martineau & Prenoveau, contractors. Marchand & Haskell, architects.

SASKATOON, SASK.—The contract for construction of waterworks system has been let to Mr. Fry, of Moose Jaw, at $73,000. The Canada Foundry Co., Toronto, will supply the cast iron pipe at

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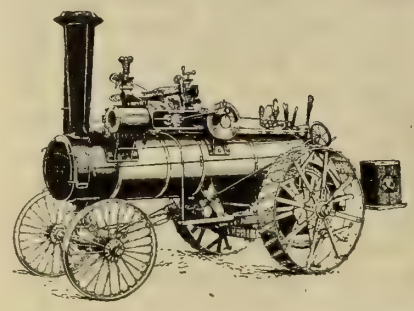
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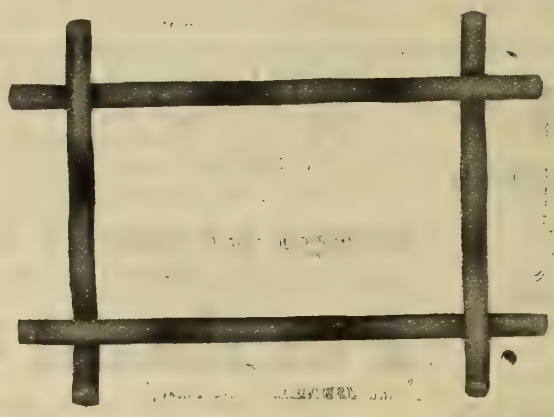
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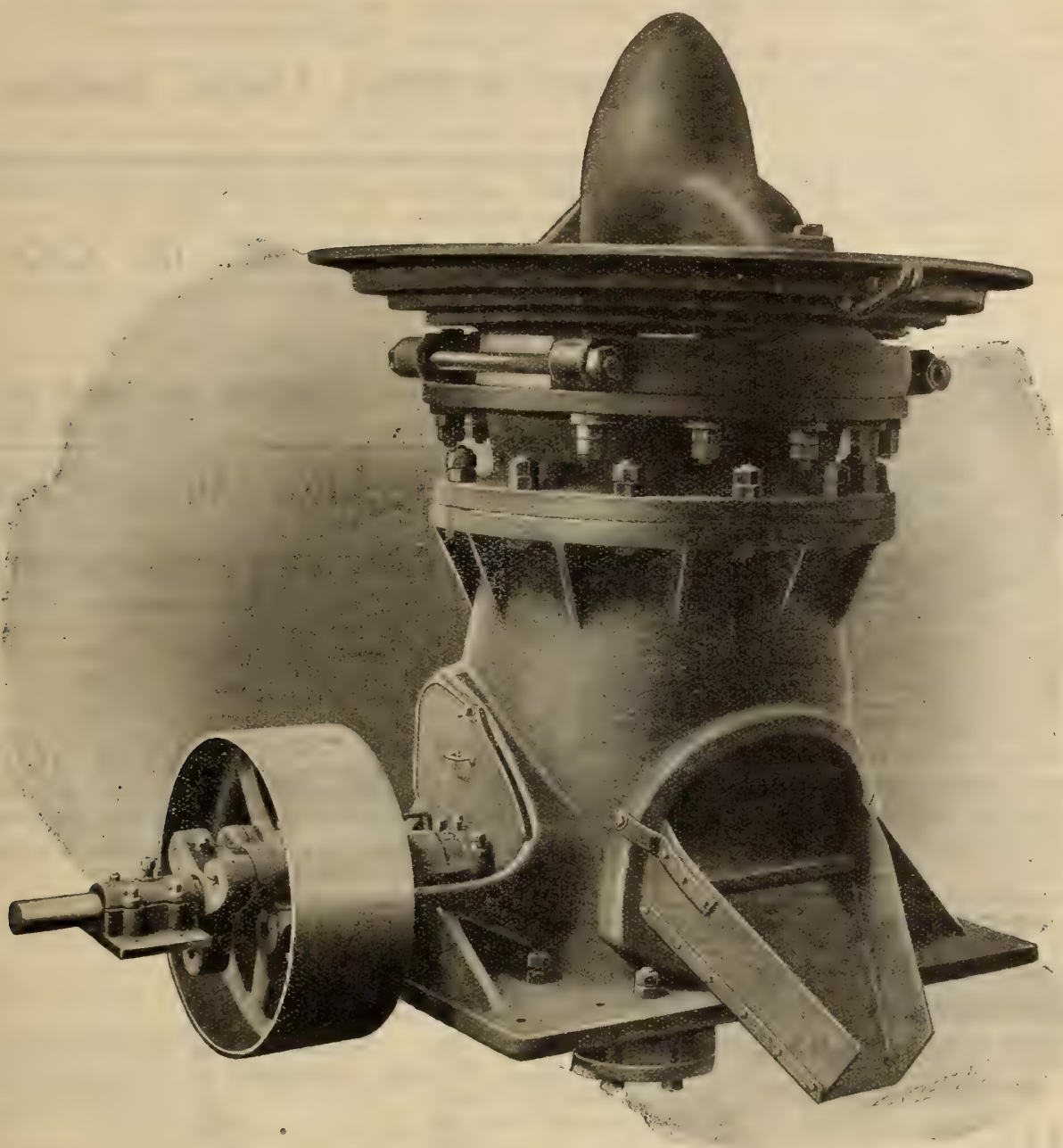

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approximateiy $20,000.—Erection of new school in Ward two and enlargement of school in Ward three: A. W. Cassidy, contractor.

VANCOUVER, B. C. — Three-story brick and concrete building, corner of Burrard and Pender streets, for Mrs. E. Charleson: J. J. Honeyman, architect; B. Davidson, contractor.

WELLAND, ONT.—Buildings for the Ontario Iron & Steel Co.: William Irvin & Sons Co., of Hamilton, and the Welland Construction Co., contractors, cost about $265,000.

PORTAGE LA PRAIRIE, MAN.—Hotel on Main street: A. McLarty, contractor; 80 x 40 feet, three stories, brick veneer, stone foundation. — Distributing warehouse for Imperial Oil Co.: D. Winton, contractor.

WOODSTOCK, ONT.—New knitting factory: Carpenter work, Fred Richardson; cement, stone and brick work, C. W. Crocker & Son; architect, Mr. McNichol; 108 x 50 feet, three stories, cement stone and brick, with gravel roof.

MEDICINE HAT, ALTA. — $58,000 5 per cent. debentures have been sold to Wood, Gundy & Co., Toronto, at $59,396 and accrued interest. Other bidders were: National Trust Company, 59,356; Aemilius Jarvis & Company, 58,783.

BRANDON, MAN.—The tender of the Northern Electrical & Manufacturing Co. has been accepted for supply of automatic fire alarm system, at $2,645.—The Gutta Percha & Rubber Manufacturing Co., Toronto, will supply Paragon hose at 90 cents per foot.

WINNIPEG, MAN.—The City Council has accepted the following tenders: Brass goods, Robert Mitchell Co.; fire hose, Canadian Rnbber Co. and Winnipeg Rubber Co.; three hook and ladder trucks, W. E. Seagrave, Walkerville, $2,765. The Council have also decided to purchase a Decairie incinerator.—Erection of Imperial Bank building, corner Bannatyne Ave. and Main street: Kelly Bros., Mitchell Co., contractors, cost about $150,000.

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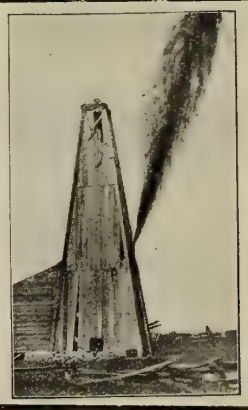

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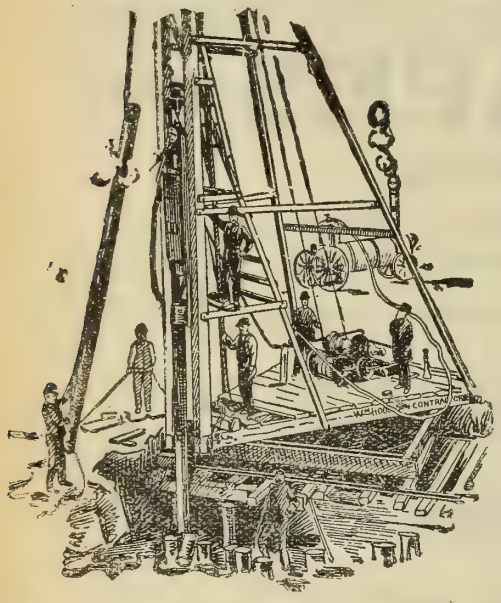

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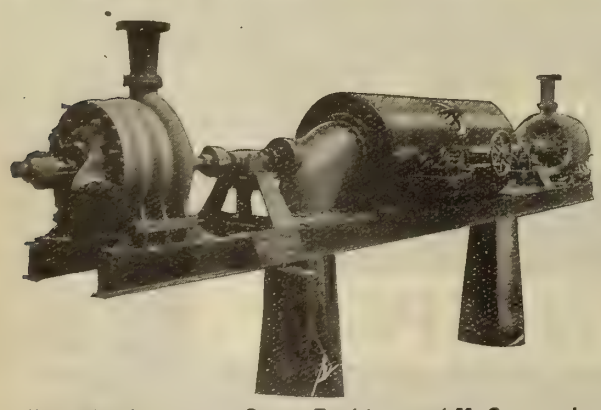

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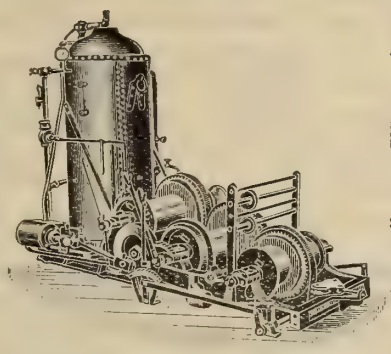

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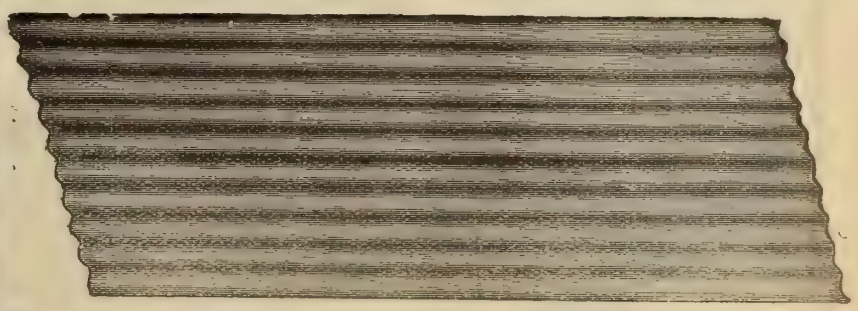

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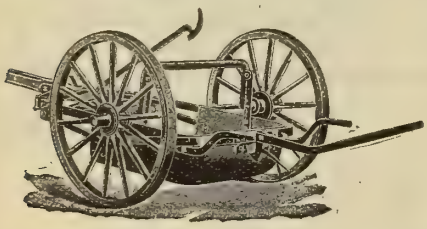

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							Neat.					3 (Sand) to 1 (Cement)				
					Initial	Final	1 dy.	7 dys.	28 dys.	3 mos	1 yr.	1 dy.	7 dys.	28 dys.	3 mos.	1 yr.
1903	20	O.K.	3.135	2.1	162	345	307	701	783	827	*	74	214	299	367	*
1904	44	O.K.	3.150	2.0	132	342	300	744	848	914	938	86	262	354	401	427

* Tests for 1 year were not completed when records closed. 1905 report not yet issued.

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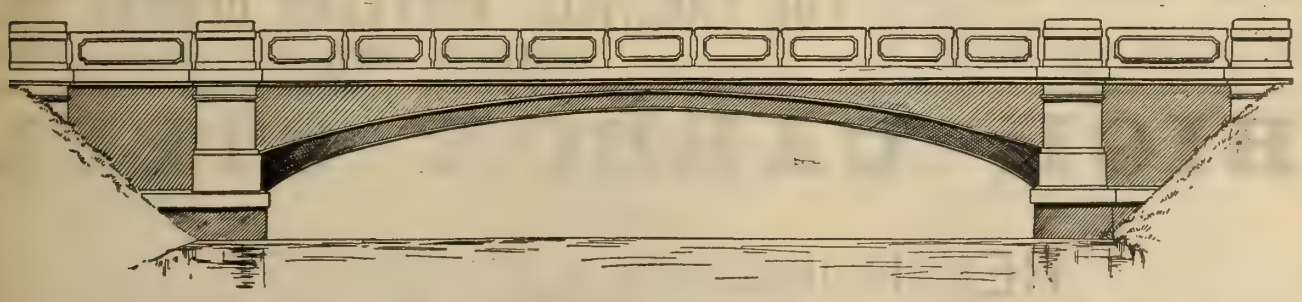

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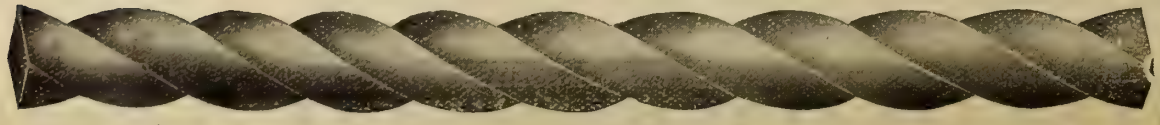

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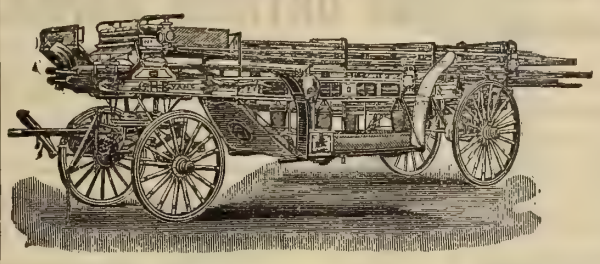

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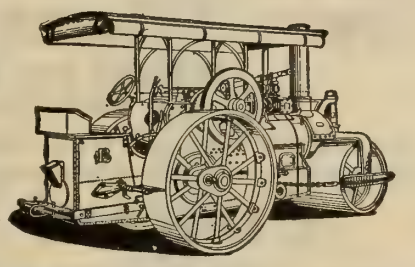

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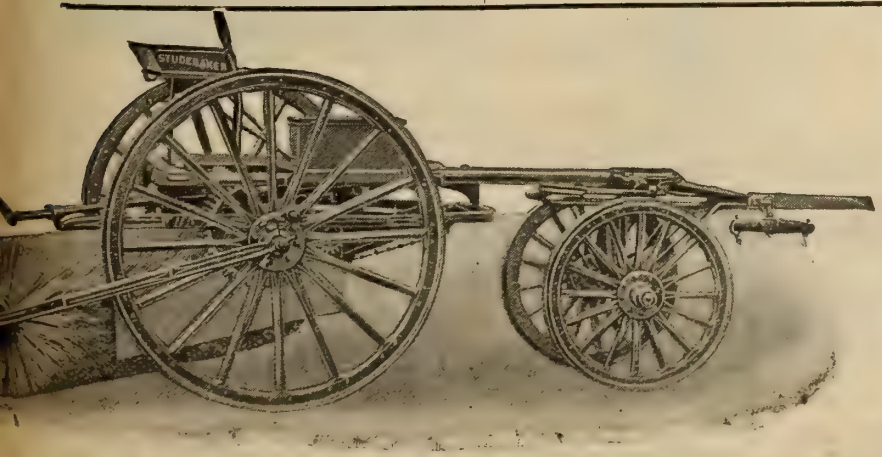

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Because no sweeper so effectually does the work for which it is designed as "The Studebaker." It Sweeps Clean. No sweeper is constructed with the same degree of care and mechanical precision. It Wears Well. "The Studebaker" has the smallest number of working parts, and has less gearing than any other sweeper made; It is free from all unnecessary complications, With reasonable care it does not get out of order Send for complete descriptive catalogue.

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Does not clog or get out of order. Greatest width of spray Can be graded from driver's seat to any volume.

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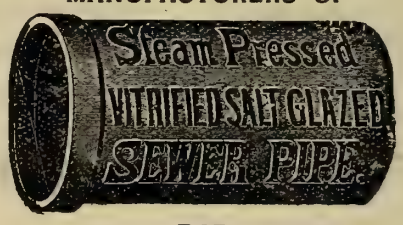

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The above Cement we fully guarantee to fulfil the requirements of Canadian and American Societies of Civil Engineers.
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The Nash Road, Borough of Brooklyn, N.Y. City, U.S.A

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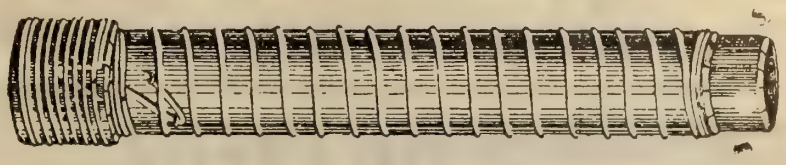

High pressure pipe for **Water Works Systems,** irrigation power plants, etc. Sizes 2" to 24", half the cost of cast iron. **Write for Catalogue.**
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SEWER PIPES,
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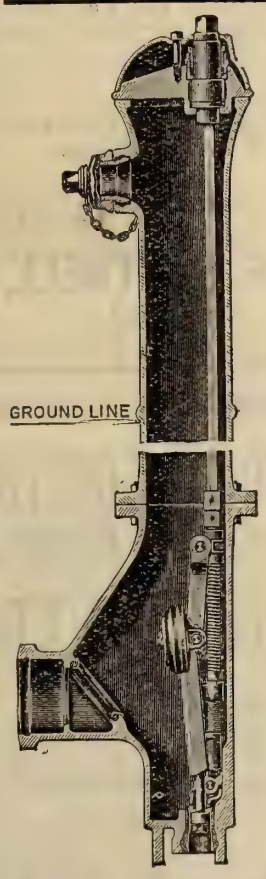

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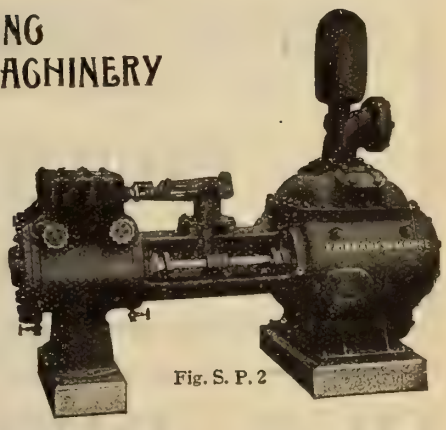

Fig. S. P. 2

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— Unexcelled for Strength and Uniformity —
RAVEN LAKE PORTLAND CEMENT CO.
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Norris & Lockhart, plumbers, Galt, Ont., have assigned to William Foster.

The plumbing establishment of the W. Handford Co., of Winnipeg, Man., was destroyed by fire recently. Practically nothing was saved.

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Rates Reasonable. See our Agent in your town or write direct to us
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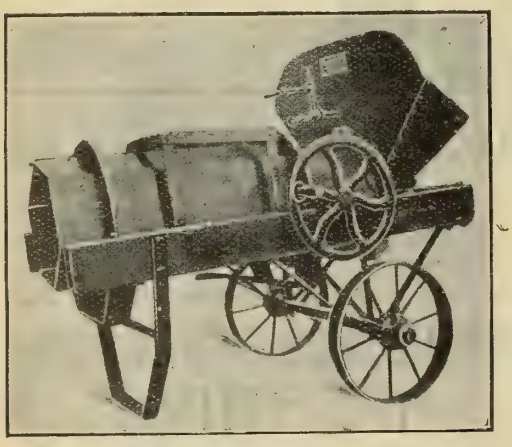

Specially adapted for Sidewalk and Street Work, and all classes of concrete work where a thorough mixture with but small capacity is required.

Other Mixers and Concrete Mixing Machinery.

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OUR DUPLEX CATCH BASIN

has been recommended by eminent Engineers as the
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Can be adjusted to different heights and is easily placed.

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Special Castings,

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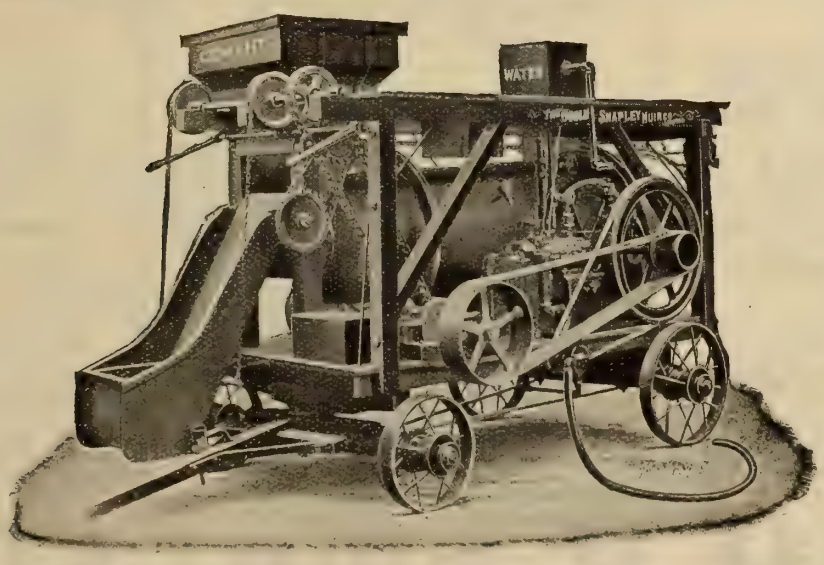

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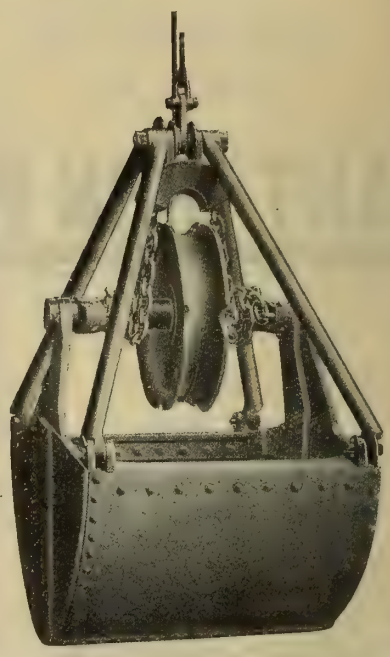
Contractors'

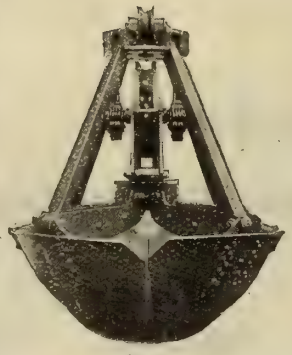
TUBS and BUCKETS

Suitable for every purpose

CONTRACTORS' CLAM SHELL GRAB BUCKET

For handling loose material such as sand, gravel, coke, coal, broken stone, etc., and for light excavating purposes, our **Clam Shell Buckets** are most suitable.



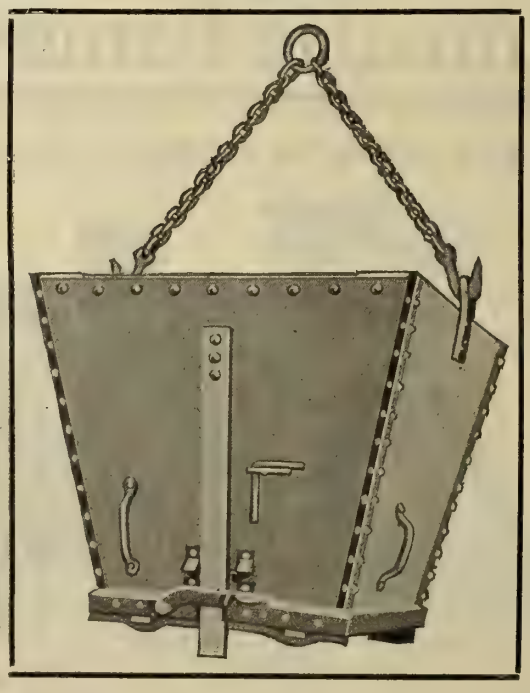


ORANGE PEEL GRAB

This grab is of superior design and construction throughout, and is particularly adapted for excavating and is in common use by contractors and on dredges.

"HOPKINS" CONCRETE BUCKET

This particular style of bucket is in high favor with contractors for all classes of concrete work.



We manufacture this style bucket in any size or shape to meet your special requirements.

Tubs for Coal
handling of all description

All Capacities

Immediate Shipment

Buckets
of all descriptions

Write us for full particulars and Catalogue

F·H·Hopkins & Co.

Successors to the Late James Cooper
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CANADIAN

Contract Record

A Weekly Journal of Public Works, Tenders, Advance Information and Municipal Progress

This Paper Reaches Every Week the Town and City Clerks, Town and City Engineers, County Clerks and County Engineers, Purchasers of Municipal Debentures and Leading Contractors In All Lines Throughout Canada

VOL. 17. TORONTO, MONTREAL — SEPTEMBER 5, 1906 — WINNIPEG, VANCOUVER No. 27

THE CANADIAN CONTRACT RECORD
PUBLISHED EVERY WEDNESDAY
As an intermediate Edition of the Canadian Architect and Builder.

THE C. H. MORTIMER PUBLISHING COMPANY
of Toronto, Limited.

Subscription Price, $2 per annum, payable in advance.

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Telephone Main 2362.

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Wanted

Able energetic superintendent for architect; executive ability; one who can push work intelligently aud use necessary foresight to this end. Apply to Box 85, CONTRACT RECORD.

TO CONTRACTORS

Sealed bulk bids or estimates will be received by the undersigned for work required in the erection of a Public Library in the town of Oshawa until noon SEPTEMBER 12TH, 1906.

The Library Board reserves the right to reject the lowest or any bid.

Plans and specifications may be seen at the offices of the architects and at the Town Clerk's office in Oshawa on and after September 3rd, 1906.

CARRERE & HASTINGS and
EUSTACE G. BIRD,
Associated Architects,
Lawlor Building, Toronto.

SALE OF DEBENTURES

Sealed bids will be received by the undersigned, the City Treasurer of the City of Fredericton New Brunswick, at his office in the City of Fredericton, until noon SEPTEMBER 15TH, 1906, for any or all of the following City Debentures issued under authority of the Acts of Assembly of New Brunswick:

$45,000 Fredericton Water Improvement Bonds bearing 4%, payable half yearly on March 15th and September 15th, principal payable $1,000 annually, beginning September 15th, 1911, and balance of $20,000 payable September 15th, 1946.

Also $15,000 Sewerage Bonds at the same rate with accrued interest from July 15th 1906, maturing July 15th, 1946. All above bonds are issued in amounts of $500 each.

The City reserves the right to reject any or all bids or to accept any bid.

I. R. GOLDING,
City Treasurer.

Fredericton, N. B., August 13th, 1906.

DEPARTMENT OF RAILWAYS AND CANALS.

RIDEAU CANAL

NOTICE TO DEALERS IN CEMENT

Sealed tenders addressed to the undersigned and endorsed "Tender for Cement," will be received at this office until 16 o'clock on Friday, the 14th September, 1906, for the supply of 1,750 barrels of Portland Cement, to be delivered in bags into the Ottawa Forwarding Company's Sheds, in the Canal Basin, in the City of Ottawa, by the 30th September, 1906.

Specifications can be procured at the office of the Superintending Engineer of the Rideau Canal, Canadian Building, Ottawa, on and after this date.

The Department does not bind itself to accept the lowest or any tender.

By order,
L. K. JONES,
Secretary.

Department of Railways and Canals,
Ottawa, 28th August, 1906.

Newspapers inserting this advertisement without authority from the Department will not be paid for it.

EXTENSION OF TIME

TOWN OF MOOSOMIN

Province of Saskatchewan

TENDERS FOR WATER WORKS

Sealed tenders addressed to the Secretary-Treasurer of the town of Moosomin, Sask., will be received until 7.15 p.m. on

THURSDAY, SEPTEMBER 20TH, 1906,

for the following subdivisions of the proposed works:

Contract "A"—Trenching, Pipelaying, etc., for 6,000 feet of water mains and 2,600 feet of storm sewers.
Contract "B"—Pump House.
Contract "C"—Steel Water Tower.
Contract "D"—Pipes and Specials.
Contract "E"—Valves and Fire Hydrants.
Contract "F"—Sewer Pipes.
Contract "G"—Fire Pump and Gasoline Engines.

Plans and specifications will be ready for inspection and may be seen at the office of the Chief Engineer, 103 Bay street Toronto, Ont., or at the office of the Secretary-Treasurer, Moosomin, Sask., about August 2 st, 1906.

No tender necessarily accepted.

A. WHYTE, Esq., Mayor, Moosomin, Sask.
JOHN SMITHERS, Esq., Secretary-Treasurer, Moosomin, Sask.
WILLIS CHIPMAN, C.E.
Chief Engineer,
103 Bay Street,
Toronto, Ont.

CITY OF GUELPH

TO CONTRACTORS

Sealed tenders marked "Tender for Cement Walks", will be received by the undersigned up to 31ST INSTANT for the laying of from 8,000 to 10,000 feet of cement walk in accordance with specifications to be seen at the office of the City Engineer.

The lowest or any tender not necessarily accepted.

RICHARD MITCHELL,
City Clerk.

TENDERS FOR BRAMPTON PUBLIC LIBRARY

Sealed tenders addressed to the undersigned will be received up to noon of the FIFTEENTH DAY OF SEPTEMBER, 1906, for the erection and completion of a Public Library Building in the Town of Brampton. Plans and specifications may be seen at the office of the architects, Wickson & Gregg, 59 Yonge street, Toronto, or at the Public Library, Brampton. Tenders may be made for the various works separately or jointly. The lowest or any tender not necessarily accepted.

R. N. BURNS, Brampton,
Secretary Brampton Public Library Board.

Dated August 31st, 1906.

City of Moose Jaw, Saskatchewan

TENDERS FOR WATERWORKS CONSTRUCTION

Sealed tenders will be received by the undersigned up to MONDAY, SEPTEMBER 17TH, 1906, at 5 o'clock p. m., for the undermentioned contracts, plans and specifications of which can be seen at the office of the City Engineer. The Council reserves to itself the right to reject any or all tenders. A marked cheque of 5%, payable to the Secretary-Treasurer at Moose Jaw, is to accompany each tender.

CONTRACT A

Labour and certain materials in connection with installing a gravity water supply consisting of 11,980 lineal feet 12" wood stave water main; 29,715 lineal feet 10" wood stave water main, and 650 feet 15" tile gallary, with all necessary valves and fittings, more or less.

CONTRACT B

For the construction of a Concrete Dam with earth embankment at the Snowdy Springs, eight miles south west of the city and a concrete lining to one side of basin.

CONTRACT C

For cleaning off the top soil at Snowdy Springs to a depth of five feet more or less.

CONTRACT D

For the construction of a Re-inforced Steel Concrete Storage Reservoir adjoining the City Power House.

JOHN D. SIMPSON,
Secretary-Treasurer,
Moose Jaw, Sask.

[FOR ADDITIONAL ADVERTISEMENTS FOR TENDERS SEE NEXT PAGE.]

WANTED

Position as Engineer to small Town, or as Assitant to City, Town or County Engineer, 7½ years similar experience, any part. Box 86, CONTRACT RECORD, Toronto.

To Excavators

Tenders will be received at the offices of the undersigned until SATURDAY, SEPTEMBER 8TH, at 12 o'clock noon, for the excavating work required in the erection of a large warehouse on Wellington street. Plans and specifications may be seen at the offices of the architect. The lowest or any tender not necessarily accepted.

GEO. W. GOUINLOCK, Architect,
1108 Temple Building, Toronto.

Town of Carman, Man.

Contractors for Structural Steel Work are invited to submit tenders, plans and specifications for the erection and completion of an

ELEVATED STEEL WATER TANK

having a capacity of 60,000 imperial gallons on a 90-foot steel substructure to be erected in the Town of Carman, Manitoba.

All tenders must be addressed to the Secretary-Treasurer and the time for receiving same will expire at 8 p.m., FRIDAY, SEPTEMBER 14TH, 1906.

The lowest or any tender not necessarily accepted.

Further particulars may be obtained at the office of the Engineer, phone 3785.

CECIL GODDARD, C.E.,
6 Roslyn Road, Winnipeg.
A. MALCOLMSON, Sec.-Treas.,
Carman, Man.

TOWN OF ARNPRIOR

Debentures for Sale

$35,000.00

Sealed Tenders marked "Tenders for Debentures" will be received by the undersigned up to 8 o'clock p.m.,

Tuesday, September 11th, 1906

for the purchase of Debentures to the amount of $35,000.

The said debentures are payable in twenty years from the fifteenth day of December, 1909, and bear interest at the rate of four and a half per centum per annum payable yearly.

The money for the said debentures to be payable at the Bank of Ottawa, Arnprior, free of charge to the town.

The highest or any tender not necessarily accepted.

W. M. HOWE, Mayor,
Town of Arnprior, Ont., Can.

Mayor's Office, Arnprior, August 29th, 1906.

Tenders For

HIGHWAY BRIDGES

Sealed tenders will be received by the undersigned up till noon of MONDAY, SEPTEMBER 10TH, for the construction of a Re-Inforced Concrete Arch Bridge of 50 ft. span, to replace the wooden structure, at present known as Coleman's bridge, near Banda, in the County of Simcoe. Alternate bids will also be received for the erection of Concrete Abutments for a 54 ft. steel span, to be erected at the same place as above.

Plans, specifications, and instructions to bidders may be seen either at the offices of the Engineers, Messrs. Connor, Clarke & Monds, 36 Toronto Street, Toronto, or at the office of John A. Bell, New Lowell, and at the office of Geo. McAlister, Shelburne.

GEO. McALISTER,
J. A. BELL,
JAS. MARTIN,
J. A. BEST,
Co. Commissioners for Simcoe and Dufferin.

Sealed tenders will also be received by the undersigned up to SEPTEMBER 14TH for the replacing of the Edenvale Bridge in the County of Simcoe by a steel or concrete structure about 290 feet long, according to plans and specifications prepared by Connor, Clarke & Monds, Consulting Engineers, Toronto.

Separate tenders are asked for the steel superstructure for concrete abutments for same; and also for a reinforced concrete arch bridge. Plans and specifications may be seen at the office of the undersigned or of the Engineers, 36 Toronto Street, Toronto, or of W. J. Stewart, Elmvale.

R. J. FLETCHER,
Connty Clerk, Barrie.

To Contractors

Sealed tenders will be received by the undersigned for all trades required in the erection of a residence in Huron street, Toronto, and for two residences in Binscarth road, Toronto, up to noon of WEDNESDAY, SEPTEMBER 12TH.

Lowest or any tender not necessarily accepted.

F. S. BAKER, Architect
Mail Building, Toronto.

THE BOARD OF EDUCATION

TENDERS WANTED

Sealed tenders addressed to the Secretary Treasurer of the Board, will be received until

Friday Noon, September 14, 1906,

for the several works required for the erection of a

New School Building on Phoebe Street

and for the enlargement of the following schools:

Dewson Street School
Kew Beach School

also for

Heating and Ventilation at Essex Street and Withrow Avenue schools

Specifications may be seen and all information obtained at the offices of the Board, City Hall. Each tender must be accompanied by the deposit mentioned in the said specifications and forms of tender.

The lowest or any tender not necessarily accepted.

W. C. WILKINSON,
H. SIMPSON, Secretary-Treasurer.
Chairman of Committee.

CONTRACTS OPEN.

BRADFORD, ONT.—Mr. Carefoot will build a residence on Bartie street.

TREHERN, MAN.—The construction of a sewerage system is contemplated.

TERRA COTTA, ONT.—The Brick Co. intend building a block on Main street.

ST. MARY'S, N. B.—The ratepayers have declared themselves in favor of a system of waterworks.

DAVIDSON, SASK.—A new school will be built here, cost $10,000, also a new Methodist church.

GLADSTONE, MAN.—A by-law to raise $3,000 for school purposes will be voted on September 11th.

NORTH SYDNEY, N.S.—The Nova Scotia Telephone Co. have decided to erect a new exchange here.

SASKATOON, SASK. — Architect Cordery has prepared plans for a new English church to be built this fall.

KAMLOOPS, B. C.—N. S. Dagleish has purchased property on which to erect a store building and warehouse.

PARRY SOUND.—Voting on the by-law to raise $10,000 for extending the intake pipe will take place on the 17th inst.

COLLINGWOOD, ONT.—John Wilson, architects, has prepared plans for a two-storey brick residence for Mr. McKean.

SHELBURNE, ONT.—Melancthon Township Council are getting figures on a steele bridge to be built over the Grand river.

BERLIN, ONT.—Plans are being prepared for a new Opera House here, cost $30,000, to be managed by J. D. Eagan.

BOULEVARD ST. PAUL, QUE.—The Corporation proposes to borrow $100,000 for the construction of drains and sewers.

WESTPORT, ONT.—William McKnight, township clerk of North Crosby, desires bids by October 20th for purchase of $1,751.85 5 per cent. debentures.

PINKERTON, ONT.—J. J. Donnelly, clerk township of Greenock, will receive tenders up to 22nd inst., for purchase of $5,000 4 per cent. debentures.

ST. MARY'S, ONT.—The by-law to advance $40,000 towards building an electric railway from St. Mary's to Embro was carried by a large majority last week.

ARROWHEAD, B. C.—C. R. Lamb, Hall Watson and associates, of Minneapolis, have purchased the saw mill of the Arrowhead Lumber Co. and will enlarge the plant.

GODERICH, ONT. — The Grand Trunk Railway have acquired property for the purpose of building a freight office and shed and later it is intended to erect a round house.

DARTMOUTH, N. S.—W. W. Doane, C. E., of Halifax, has been engaged to prepare plans for sewers here.—George Hall intends erecting a residence on Waverley road.

LONDON, ONT.—It is probable that the City Council will at an early date take up the question of a water supply. The Mayor favors the utilization of the water of Lake Huron.

TORONTO JUNCTION, ONT.—R. G. Cowan will erect a two story dwelling on Clara street, cost $2,000.—E. St. Clair intends erecting a dwelling on the same street to cost $2,100.

HAMPTON, N. B.—J. M. Scovil desires tenders by the 8th inst. for erection of frame school building. Plans at Court House and at office of G. Ernest Fairweather, architect, St. John.

FORT FRANCIS, ONT.—The time for receiving tenders for labor for construction of waterworks and sewerage systems has been extended to September 12th. John Galt, Toronto, consulting engineer.

COBALT, ONT. — A. Glendinning, Secretary-Treasurer, wants tenders for erection of Presbyterian church.—A local syndicate has leased the Hound Chute and The Notch water powers on the Montreal River.

WESTMOUNT, QUE. — William Minto, Secretary-Treasurer, wants bids by 10th inst. for purchase of $125,000 electric light debentures and $150,000 drainage and road improvement debentures, all 4 per cent.

GALT, ONT.—The Bell Telephone Co. will install a central energy system and make other improvements.—G. E. Bradshaw has submitted a proposition to the Town Council to establish a central heating plant here.

BRANTFORD, ONT.—A new theatre is to be built on Colborne street for A. J. Small, of Toronto, to cost $45,000.—The Massey-Harris, Co. have decided to extend their main building by an addition 14 x 172 feet, three stories and basement.

QUEBEC, QUE. — The Dominion Government, as owners of the Intercolonial Railway, have agreed to a plan for the erection of a large Union station in this city.—J. Gallagar, waterworks engineer, wants tenders by September 10th for construction of a break sewer from C. P. R. yard to St. Andre street.

PRESTON, ONT.—Wm. Davis, C. E., of Berlin, has been engaged by the Town Council to superintend the construction of waterworks and sewerage systems here.—C. R. Hanning, Town Clerk, desires tenders by 15th inst. for supply of material and construction of five miles of 12-inch, 10-inch, 8-inch and 6-inch cast iron water pipe. Specifications from Davis & Johnston, Berlin and Galt.

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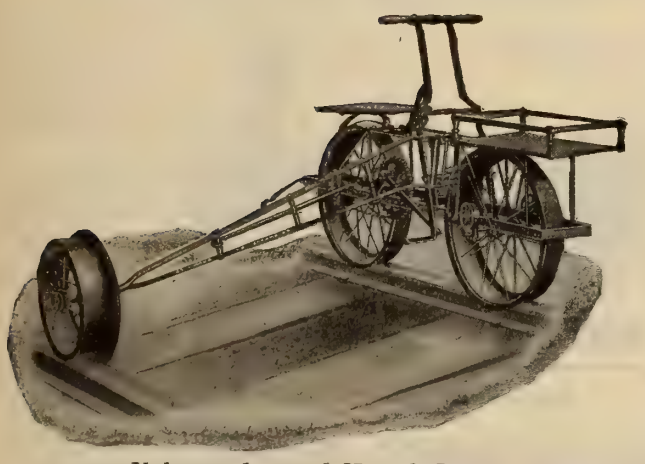

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HAMILTON, ONT.—The Terminal Co. are acquiring considerable property on King street, although the plans of the new building are as yet uncertain.—Building permits have been granted as follows: Dowswell Manufacturing Co., frame and steel warehouse, corner of Wellington and Simcoe streets, cost $2,000; J. Kerr, two brick and frame dwellings, Poplar avenue, between Fairleigh and Sherman avenues, cost $2,800.

NEW WESTMINSTER, B.C.—The ratepayers will decide in December what steps shall be taken towards providing increased school accommodation.—Negotiations are on foot for the electrification of the New Westminster junction line and its extension to Eburne, the total cost of which will probably be $500,000. The British Columbia Electric Railway Co. will undertake the work.—The Lulu island bridge will probably be rebuilt, at a cost of $30,000.

WATERLOO, ONT. — The Water and Light Commissioners have decided to call for tenders for excavation and brick work of storage well.—The by-law to provide $5,000 for waterworks and $10,000 as a bonus to George Halberstadt were carried recently. Mr. Halberstadt will built a furniture factory, 100 x 56 feet, three stories and basement, with boiler attached 40 x 38 feet, and large dry kiln, the foundations to be of concrete and the buildings of white brick.

EDMONTON, ALTA.—Tenders will be invited immediately for the new Y. M. C. A. block, four stories and basement, cost $6,000; H. A. Magoon, architect.—C. P. R. engineers are engaged in staking out the final survey for the approach to the Edmonton side of the river for the high level bridge.—The City Council have ratified the Grand Trunk Pacific agreement which provides that in consideration of $100,000 bonus and right of way into the city, the Grand Trunk Pacific Railway will establish their divisional terminus here.

PETERBORO, ONT.—The Board of Education have decided to increase the present North Ward school to a ten-roomed building on condition that the Ontario Government build the new Normal school in that part of the city.—W. Blackwell, architect, is preparing plans for an Isolation hospital to cost not more than $6,000.—J. T. O'Connell & Co. will build a number of medium sized residences on Westcott street and several on Albert street.—The County Council will shortly call for tenders for heating, plumbing and lighting of the new House of Refuge.

OTTAWA, ONT.—The Public Works Department are preparing plans for proposed wing to the House of Commons. Tenders will shortly be invited and the foundation built this year.—A meeting of the Board of Architects which will arrange the terms of the competition for the plans of the new departmental building to be erected on MacKenzie avenue and Sussex street will be held this month. The competition will be restricted to Canadian architects.—The City Council will ask the Ontario Railway and Municipal Board for authority to issue $50,000 of debentures for extending the Municipal lighting plant.

WINNIPEG, MAN.—The Nena street Baptist church property corner of Ross aveuue and Nena street, has been sold, and the congregation will build a new church on another site.—A committee was appointed a short time ago to report upon available sites for three new fire halls.—Steward Milvey, Secretary School Board, requests tenders by Thursday, October 4th, for supplying single adjustable school desks required by the Public School Board for two years from date of contract.—Only one tender was received by the City Council for the building of a new power house and it has been decided to ask for new tenders.

VANCOUVER, B.C.—Dalton & Eveleigh, architects, have prepared plans for a brick and granite building, three stories and basement, to be built on the corner of the Esplanade and Lonsdale for J. W. Horne, cost about $25,000. The basement will be for warehouse purposes, the ground floor for stores, the second storey for offices, and the third for rooming flats.—Parr and Fee, architects, are preparing plans for a six storey block on Water street for A. St. G. Hamersley.—Mr. Bissett has taken over the old Library building and will convert it into a first-class hotel, at cost of about $30,000.—Tenders have been taken for the foundations for the new Court House in this city.

MONTREAL, QUE.—It is stated that Jenkins Bros., of Bridgeport, Conn., have decided to establish a Canadian branch of their works in this city, the plans for which have been prepared by Brown & Vallance. The factory building will be of brick, three stories, 200x50 feet; foundry building 150x64 feet; engine and boiler house, 45x60 feet. The contracts will be awarded immediately.—The Brand, Henderson Lead Corroding Works will, according to report, build a new plant in this city. Plans have been completed for a new convent to be built at Lachine by the Sisters of St. Anne, to cost about $30,000.—The congregation of Notre Dame will erect a building on St. Alexander street cost $19,500.—E. P. Buchanan has been granted a permit for nine tenaments to be built on Selkirk street, to cost $15,000.—Ames-Holden, Limited, have purchased property bounded by Lagauchetiere, Inspector and St. Monique and basement, or reinforced concrete construction.

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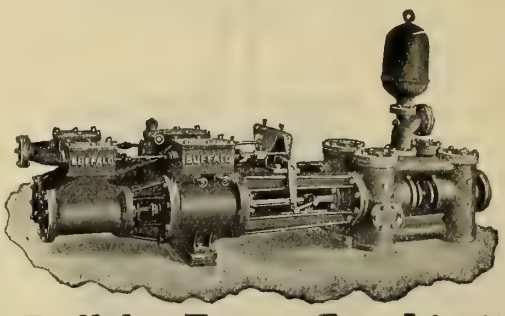

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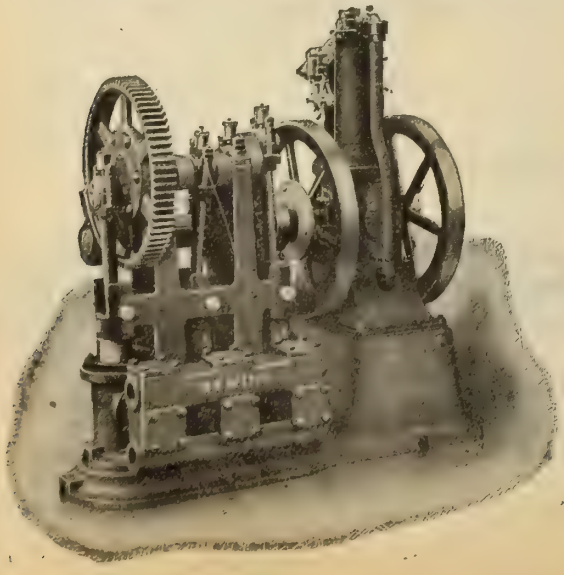

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TORONTO, ONT.—Plans of waterworks and sewerage systems to be constructed at Fort Francis, Ont., may still be seen at the office of John Galt, C. E. & M. E., this city. Tenders have been extended to September 12th.—Fred Ommosip is about to erect a new hotel at 58 and 60 Young street, of reinforced concrete, six stories, 40 rooms, cost about $100,000.—The Hamilton Steamship Co. contemplate making extensive alterations to their wharf.—The Board of Control have sold to the Board of Education the land on the south-east corner of Gerrard street and Jones avenue as a site for the new Riverdale High school.—The City Engineer has recommended the construction of the following pavements and sewers: Asphalt pavements — Shanley street, from Delaware avenue to Salem avenue, cost $5,111; Peter street, from King to Queen street, $6,751; Leslie street, from Queen to Gerrard, $15,678; Manning avenue, from Queen to Robinson street, $3,037; Huxley street, from Tyndall to Jameson avenue, $12,851; Roncesvalles avenue, from Queen street to Boustead avenue, $48,956; Richmond

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street, from York to Simcoe street, $6,673. Bitulithic pavements—Collier street, from Yonge street to Park road, cost $3,995; Mutual street, from Queen street to Wilton avenue, $8,345; Dupont, from Bathurst to Christie street, $13,997; Blong avenue, from Pape avenue to east end, $2,146; Balmoral avenue, from Avenue road to east city limits, $4,216. Vitrified block pavements—Richmond street, from Simcoe to Peter street, cost $16,866; Soho avenue, from Dundas to the tracks, $2,096; Rosebery avenue, from Bathurst to east end, $2,066; Peter street, Front to Wellington street, $3,436. Brick pavement—Atkin avenue, from 303 feet east of Brock avenue to Sheridan avenue, cost $696. Macadam roadway on Winchester street, from Sumach street to Danforth avenue. Sewers — Eastern avenue, Logan avenue to Morse street, cost $400; Beatrice street, from point 920 feet north of College street to a point 115 feet further north, $300; Shaw place, from Shaw street to point 450 feet west, $880. —Plans for Public Library building to be built at Brampton, Ont., are on view at the office of Wickson & Gregg, 59 Yonge street, this city. Tenders close 15th inst.—The Board of Education have decided to call for tenders for the erection of the new Phoebe street school and the enlargement of the Dewson and Kew Beach schools. Plans have also been prepared for additions to Withrow avenue and Essex street schools and are in course of preparation for the new High school over the Don.—A. W. Draper has sold the property at 25-29 Temperance street to a manufacturing firm, who will build thereon.—The Board of Works will likely construct a trunk sewer in north Rosedale.

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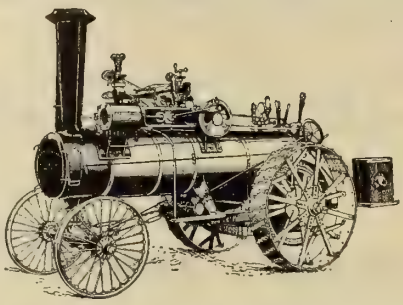
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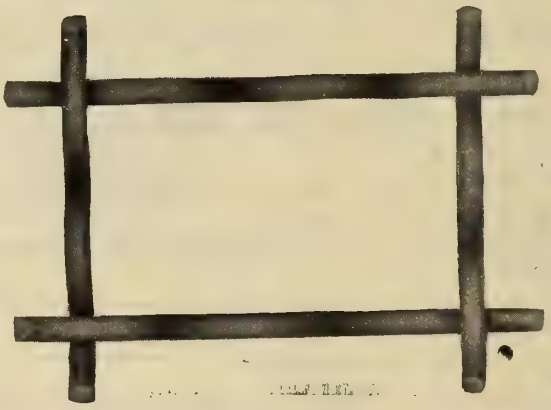
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—Building permits have been granted as follows: Love Bros., two pair semi-detached two-storey brick and roughcast dwellings, N. S. Withrow avenue, $5,000; E. Elliott, one pair semi-detached two-storey brick dwellings, E. S. Grace street, $5,000; C. E. Proctor, two pair semi-detached two-storey and attic brick dwellings, W. S. Grace street, $10,000; Saulter and Oakley, one pair two-storey brick dwellings, E. S. St. Clarens avenue, $4,000; John Pearcy, two and one-half storey brick dwelling, S. S. Woodlawn avenue, $2,500; J. H. McLaren, one pair semi-detached two-storey brick dwellings, 677-679 Dufferin street, $6,500; E. C. Tuckett, two and one-half storey brick dwelling, corner Conduit street and Bartlett avenue, $3,000; J. Lennox, two-storey brick dwelling, south side Humberside avenue, $2,600; J. A. Martin, one pair semi-detached two-storey brick veneer dwellings, 86-88 Armstrong avenue, $3,000; Mrs. M. McCabe, two-storey and attic brick dwelling, 190 Margueretta street, $3,000; F. W. Cox, five pair two-storey frame dwellings, brick fronts, Gerrard street, near Logan ave., $12,000; Bouser & Co., two-storey brick factory, Fraser avenue, $9,000; Walmer road Baptist church, one-storey brick church, corner Hewitt avenue and Roncesvalles avenue, $2,000; P. Gillian, one pair semi-detached two-storey and attic brick dwellings, 16 18 Callender street, $6,000; N. Manning, one pair semi-detached two-storey and attic brick dwellings, Markham street, near Lennox, $5,000; C. K. Burt, two-storey and attic brick dwellings, on 31 Howland avenue, $3,500.

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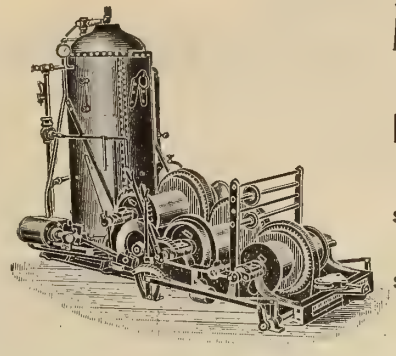
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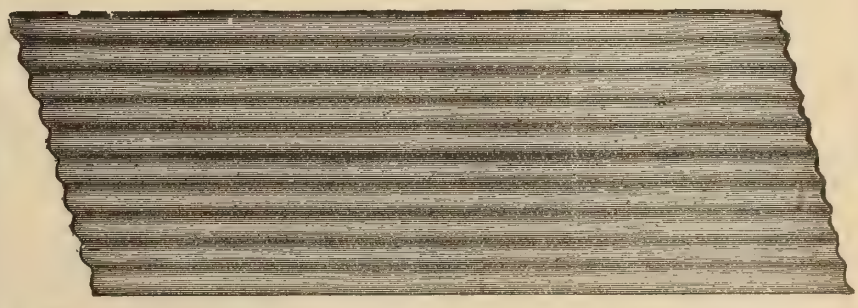
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ORILLIA, ONT.— $105,000 4½ per cent. debentures. H. O'Hara & Co., Toronto, purchasers.

PORT ARTHUR, ONT.—Construction of grain elevator: Peter Lyall & Sons, Montreal, contractors.

OTTAWA, ONT.—A contract for brick work for the new theatre here has been awarded to James J. MacPherson, of Peterboro.

TAVISTOCK, ONT. — Three storey hotel for Mr. Liebler: Masonry, M. Woelfle; other trades, Zimmerman Bros. Building will be 66 x 46 feet.

MONCTON, N. B.—New shops and store houses here for Intercolonial Railway: E. A. Wallberg, C. E., Montreal, successful tenderer, cost about $100,000.

ST. JOHN, N. B.—Building new warehouse for city: Clark & Adams, successful tenderers, $17,850. Other tenders: D. C. Clark, $19,935; R. J. Green and J. M. Belyea, $17,950.

CHATHAM, ONT.—Tenders for renovation of old market front, from plans of J. L. Wilson & Son, have been accepted as follows: Brick and masonry, J. G. McKenzie, $2,065; other trades, Hugh Gallagher & Son, $4,172.

AMHERST, N. S.—Mitchell & Sutherland have secured the contract for construction of concrete dam across the Nappan river in connection with waterworks system, their price being $39,000. —New building for Royal Bank of Canada: Rhodes, Curry & Co., successful tenderers.

MONTREAL, QUE. — The Catholic School Board have accepted the following tenders for construction of two schools in St. Helen's parish, from plans by Mr. Sawyer, architect: Stone work, Martineau & Son, $9,786; brick, P. Theriault, $14,370; woodwork, R. Laberge, $15,200; plumbing, Cadieux & Briard, $13,163; plastering, Fabien & Co., $3,500; painting, W. D. Rufiange, $2,886; electrical appliances, J. A. St. Amour, $317; marble work, Robt. Ball & Co., $2,700; steel and frame work, Dominion Bridge Co., $3,078.

SASKATOON, SASK.—The following is a complete list of the tenders accepted by the City Council for waterworks, sewerage and electric light systems: Laying sewer and water pipe, Fry & Matheson, Moose Jaw, $73,490; construction of power house and chimney, J. Willoughby and S. A. Cobert, Saskatoon, $21,000; water power and foundation, Ontario Wind Engine and Pump Co., Toronto, $8,100; cast iron pipes and specials, Montreal Pipe Foundry Co., $30,633; hydrants and valves, D. R. Wood Co., Philadelphia, $4,000; sewer pipe, Macomb Sewer Pipe Co., Macomb, Ill., $6,500; plumbing machinery, Canada Foundry Co., Toronto, $1,450; electrical apparatus, Allis-Chalmers-Bullock, Montreal, $16,651; engine, Robb Engineering Co., Amherst, N.S., $11,212; three boilers, Canada Foundry Co., Toronto, $6,500. Willis Chipman, C. E., Toronto, is consulting engineer for the above works.

TORONTO, ONT. — The Board of Education have awarded the following contracts: Enlargement of Essex street school as follows—Mason work, H. Lucas & Son, $6,993; carpenter work, W. Eaton, $5,570; painting, Taylor & Co., $481; plastering, T. Blackburn, $785; plumbing, Fred Armstrong, $115; roofing and tinsmith, A. B. Ormsby & Co., $689. Withrow avenue school—Masonry work, John E. Wells, $6,229; carpenter, Wm. Williamson, $5,281; painting, A. Taylor & Co., $496; plastering, T. Blackburn, $768; plumbing, Fred Armstrong, $115; roofing, G. Duthie & Son, $483; tinsmith, George M. Bryan, $110. Brock avenue —Tinsmith work, W. E. Dillon, $228. Palmerston avenue school—Steel lintels, McGregor & McIntyre, $6,804. Dovercourt road—Iron beams, McGregor & McIntyre, $201.50.

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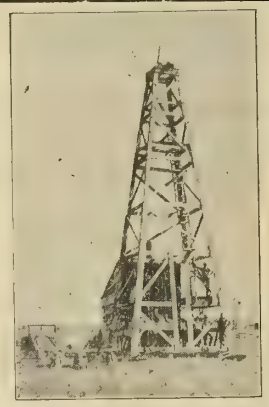

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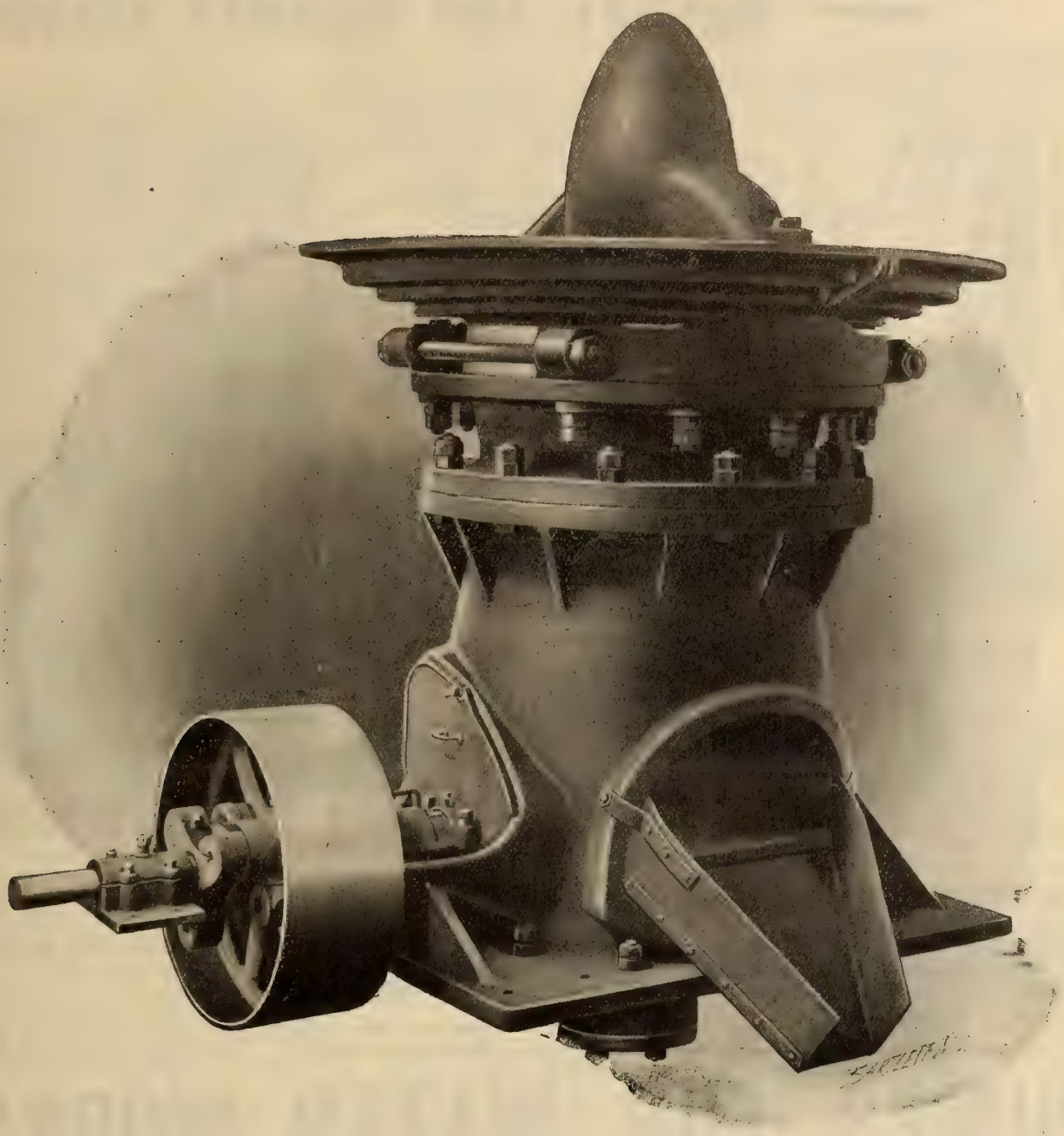

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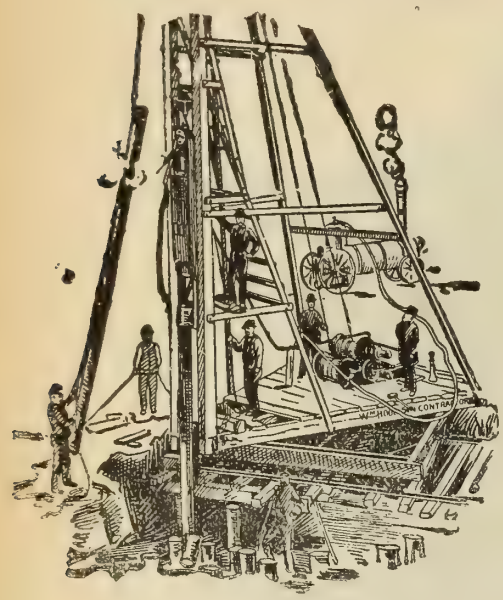

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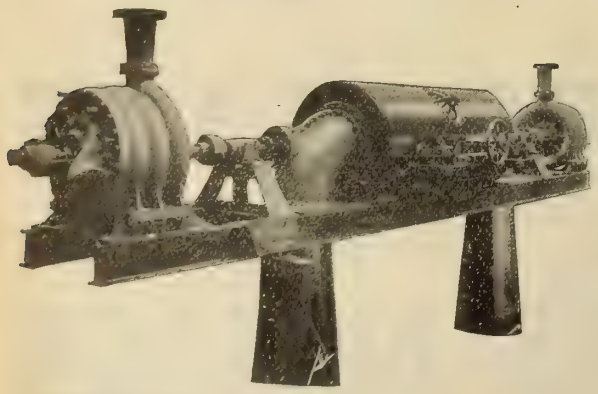

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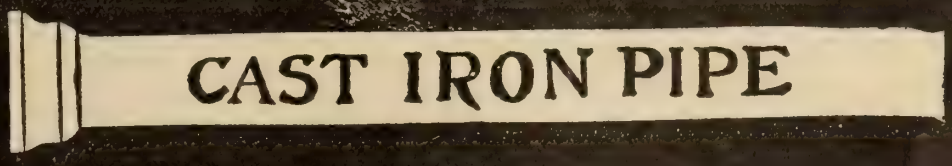

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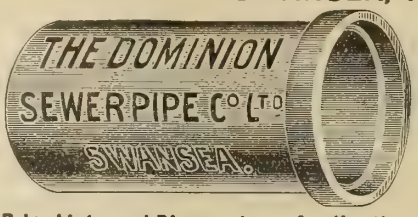

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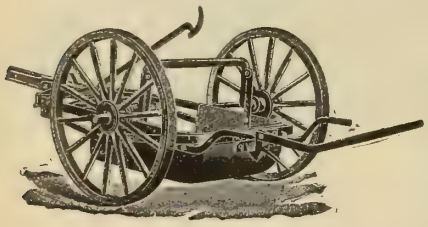

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							Neat.					3 (Sand) to 1 (Cement)				
					Initial	Final	1 dy.	7 dys	28 dys.	3 mos	1 yr.	1 dy.	7 dys.	28 dys.	3 mos.	1 yr.
1903	20	O.K.	3.135	2.1	162	345	307	701	783	827	*	74	214	299	367	*
1904	44	O.K.	3.150	2.0	132	342	300	744	848	914	938	86	262	354	401	427

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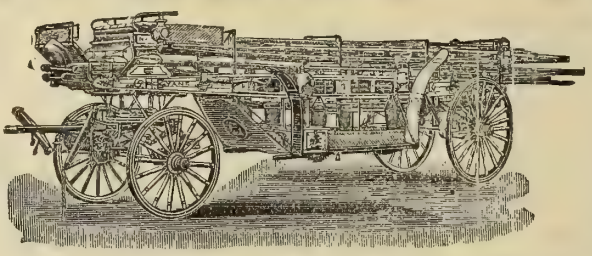

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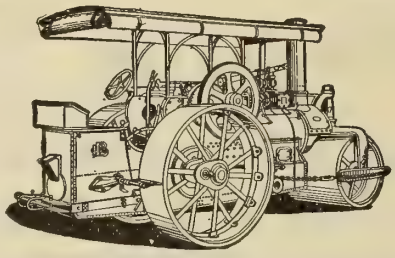

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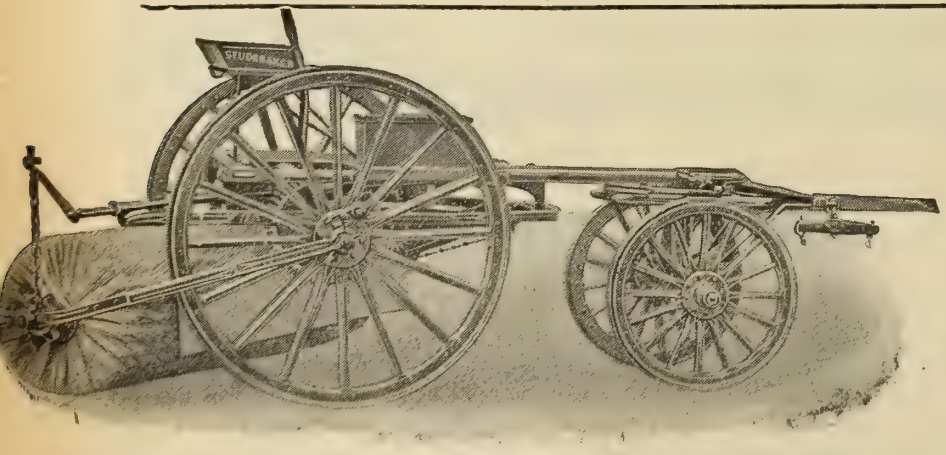

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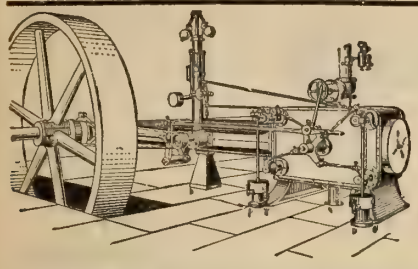

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High pressure pipe for **Water Works Systems,** irrigation power plants, etc. Sizes 2" to 24", half the cost of cast iron. **Write for Catalogue.**
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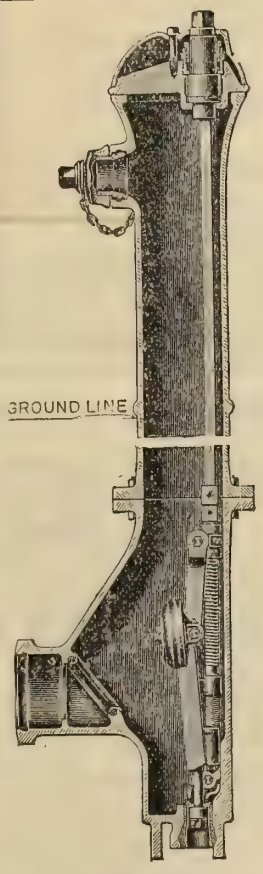

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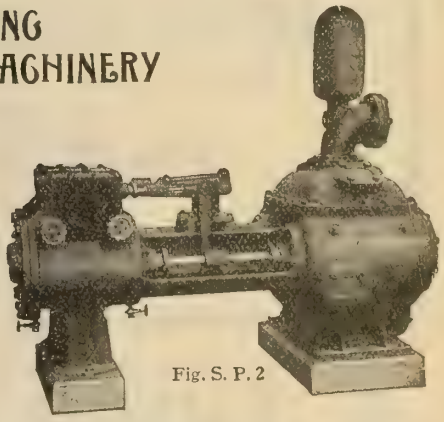

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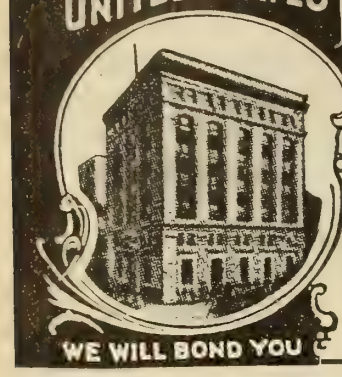
RAVEN LAKE PORTLAND CEMENT CO.
Limited
Long Distance Telephone: RAVEN LAKE, ONT. Telegraph and Post Office Address: VICTORIA ROAD, ONT.

The aggregate cost of buildings in Vancouver, B.C., for which permits were issued in July is $285,470; that of July, 1905, was $189,200.

W. H. Taylor, contractor and builder, has sold out his business, 405 Portage avenue, Winnipeg, Man., to Thomas Smith.

THE UNITED STATES FIDELITY AND GUARANTY Co.



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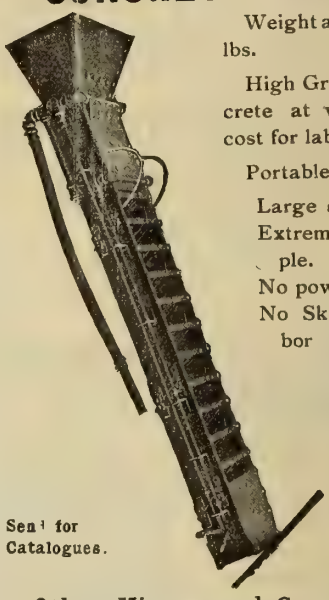

Weight about 500 lbs.
High Grade Concrete at very low cost for labor.
Portable.
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Extremely simple.
No power used
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Continuous in action.

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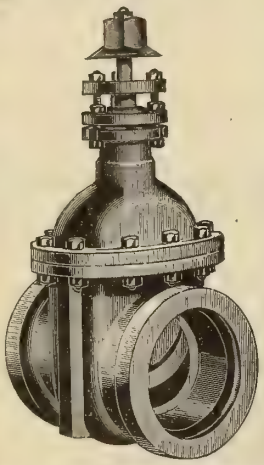

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Are tested to 300 pounds hydraulic pressure before being stocked. They are of good substantial weight and design, and can be relied upon.

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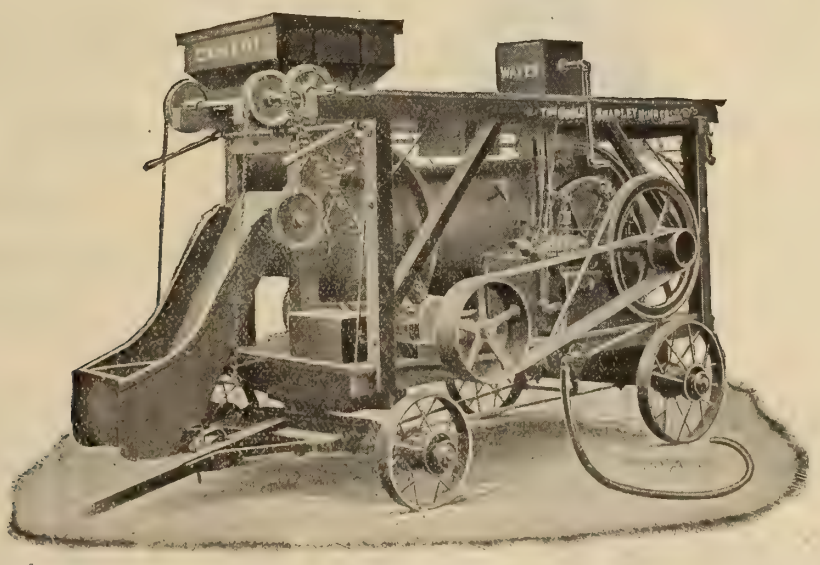

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CANADIAN

Contract Record

A Weekly Journal of Public Works, Tenders, Advance Information and Municipal Progress

This Paper Reaches Every Week the Town and City Clerks, Town and City Engineers, County Clerks and County Engineers, Purchasers of Municipal Debentures and Leading Contractors in All Lines Throughout Canada

VOL. 17. TORONTO, MONTREAL — SEPTEMBER 12, 1906 — WINNIPEG, VANCOUVER No. 28

THE CANADIAN CONTRACT RECORD
PUBLISHED EVERY WEDNESDAY
As an intermediate Edition of the Canadian Architect and Builder.

THE C. H. MORTIMER PUBLISHING COMPANY
of Toronto, Limited.
Subscription Price, $2 per annum, payable in advance.

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TENDERS FOR CEMENT SIDEWALKS

The Council of the town of Cobourg having ordered the construction of 10,000 superficial feet of Cement Sidewalks, and are to supply the cement, I will receive tenders for supplying the other materials required and constructing the walks until noon SEPTEMBER 17TH, 1906.

Specifications may be seen or had at my office.

The lowest or any tender not necessarily accepted.

D H. MINAKER,
Town clerk.

Cobourg, 3rd September, 1906.

DEPARTMENT OF RAILWAYS AND CANALS.

RIDEAU CANAL

NOTICE TO DEALERS IN CEMENT

Sealed tenders addressed to the undersigned and endorsed "Tender for Cement," will be received at this office until 16 o'clock on Friday, the 14th September, 1906, for the supply of 1,750 barrels of Portland Cement, to be delivered in bags into the Ottawa Forwarding Company's Sheds, in the Canal Basin, in the City of Ottawa, by the 30th September, 1906.

Specifications can be procured at the office of the Superintending Engineer of the Rideau Canal, Canadian Building, Ottawa, on and after this date.

The Department does not bind itself to accept the lowest or any tender.

By order,
L. K. JONES,
Secretary.

Department of Railways and Canals,
Ottawa, 28th August, 1906.

Newspapers inserting this advertisement without authority from the Department will not be paid for it.

CITY OF GUELPH

TO CONTRACTORS

Sealed tenders marked "Tender for Cement Walks", will be received by the undersigned up to 31ST INSTANT for the laying of from 8,000 to 10,000 feet of cement walk in accordance with specifications to be seen at the office of the City Engineer.

The lowest or any tender not necessarily accepted.

RICHARD MITCHELL,
City Clerk.

Town of Carman, Man.

Contractors for Structural Steel Work are invited to submit tenders, plans and specifications for the erection and completion of an

ELEVATED STEEL WATER TANK

having a capacity of 60,000 imperial gallons on a 90-foot steel substructure to be erected in the Town of Carman, Manitoba.

All tenders must be addressed to the Secretary-Treasurer and the time for receiving same will expire at 8 p.m., FRIDAY, SEPTEMBER 14TH, 1906.

The lowest or any tender not necessarily accepted.

Further particulars may be obtained at the office of the Engineer, phone 3785.

CECIL GODDARD, C.E.,
6 Roslyn Road, Winnipeg.
A. MALCOLMSON, Sec.-Treas.,
Carman, Man.

City of Moose Jaw, Saskatchewan

TENDERS FOR

WATERWORKS CONSTRUCTION

Sealed tenders will be received by the undersigned up to MONDAY, SEPTEMBER 17TH, 1906, at 5 o'clock p. m., for the undermentioned contracts, plans and specifications of which can be seen at the office of the City Engineer. The Council reserves to itself the right to reject any or all tenders. A marked cheque of 5%, payable to the Secretary-Treasurer at Moose Jaw, is to accompany each tender.

CONTRACT A

Labour and certain materials in connection with installing a gravity water supply consisting of 11,980 lineal feet 12" wood stave water main; 29,715 lineal feet 10" wood stave water main, and 650 feet 15" tile gallary, with all necessary valves and fittings, more or less.

CONTRACT B

For the construction of a Concrete Dam with earth embankment at the Snowdy Springs, eight miles south west of the city and a concrete lining to one side of basin.

CONTRACT C

For cleaning off the top soil at Snowdy Springs to a depth of five feet more or less.

CONTRACT D

For the construction of a Re-inforced Steel Concrete Storage Reservoir adjoining the City Power House.

JOHN D. SIMPSON,
Secretary-Treasurer,
Moose Jaw, Sask.

FOR SALE

We offer for immediate shipment from stock, and subject to prior sale: 10,000 ft. S & F Cast Iron Pipe "MacLarens'," 8" x 45 x 12'0" Proved to 300 and coated.

L. H. GAUDRY & CO.,
Quebec.

Tenders For HIGHWAY BRIDGES

Sealed tenders will be received by the undersigned up to SEPTEMBER 14TH for the replacing of the Edenvale Bridge in the County of Simcoe by a steel or concrete structure about 290 feet long, according to plans and specifications prepared by Connor, Clarke & Monds, Consulting Engineers, Toronto.

Separate tenders are asked for the steel superstructure for concrete abutments for same; and also for a reinforced concrete arch bridge. Plans and specifications may be seen at the office of the undersigned or of the Engineers, 36 Toronto Street, Toronto, or of W. J. Stewart, Elmvale.

R. J. FLETCHER,
County Clerk, Barrie.

TEMISKAMING and NORTHERN ONTARIO RAILWAY COMMISSION.

TENDERS FOR GRADING

Sealed tenders, addressed to the undersigned and marked respectively "Tender for Kerr Lake Branch," "Tender for Charlton Branch" and "Tender for Haileybury Spur," will be received up to 12 o'clock noon, on TUESDAY, OCTOBER 2ND, 1906, for all the work except tracklaying and ballasting connected with the building of the following branch lines, viz.:

1. From the main line near Cobalt to the Kerr Lake region, a distance of approximately four miles.
2. From the main line to a point at or near Haileybury Wharf, a distance of about one and three-quarter miles.
3. From the main line near Englehart to the Village of Charlton, a distance of about eight miles

Plans and specifications may be seen at the office of the Commission, 25 Toronto Street, Toronto, and at the Chief Engineer, North Bay, Ontario.

Marked cheques payable to the order of the Chairman and Secretary-Treasurer of the Commission must accompany tenders as follows. Kerr Lake Branch, $2,000.00; Haileybury Spur, $500.00; and Charlton Branch, $2,000.00.

Tenders must be made out on the printed form supplied by the Commission.

The commssion will not be bound to accept the lowest or any tender.

H. W. PEARSON,
Secretary-Treasurer,
25 Toronto St., Toronto.

Dated at Toronto, September 10th, 1906.

Papers inserting this advertisement without authority will not be paid for same.

[FOR ADDITIONAL ADVERTISEMENTS FOR TENDERS SEE NEXT PAGE.]

POSITION WANTED

In Contractor's office, Advertiser has had a number of years' experience, more particularly on the commercial side of the building. C. F. MYERS, 935 Bathurst Street, Toronto.

TOWN OF PRESTON

TO WATERWORKS CONTRACTORS

Tenders addressed to the undersigned will be received up to 6 p. m. SATURDAY, 22ND SEPTEMBER, 1906, for the supply of material and for the trenching, backfilling and laying of about five miles of 12", 10", 8" and 6" cast iron water pipe. Specifications and forms of tender may be obtained from the Engineers, Davis & Johnston, Berlin and Galt. Information concerning other contracts to be let will be published at a later date.

C. R. HANNING, Town Clerk,
Preston, Ont,

TENDERS FOR

HIGHWAY BRIDGE

Sealed tenders will be received by the undersigned up to SEPTEMBER 21ST for the construction of a 50 foot reinforced Concrete Arch Bridge in the Town of Oshawa, according to plans prepared by Connor, Clarke & Monds, consulting engineers, Toronto.

Plans and specifications may be seen at the office of the undersigned or of the engineers at 36 Toronto Street, Toronto.

W. S. BOWDEN, Town Engineer,
Oshawa, Ont.

CONTRACTS OPEN.

ST. JOHNS, QUE.—It is reported that an addition is to be made to the new drill hall.

BIRCH HILLS, SASK.—M. M. Whiting has taken tenders this week for building a new Methodist church.

STRATHCONA, ALTA.—The Council are considering the building of a Nurses' Home beside the hospital.

MINIOTA, MAN.—G. Rowan has taken tenders for construction of a frame school with concrete basement here.

MILTON, ONT.—The Milton Pressed Brick Co., have taken steps towards making large additions to their plant.

AYLMER, QUE.—The propositon is under consideration by the town to construct a sewerage system, cost $50,000.

SUMAS, B.C.—Plans have been completed for the dyking and drainage scheme proposed to be submitted to the people.

SOURIS, MAN.—J. W. Breakey will receive tenders up to September 29th for the purchase $3,500 5 per cent. debentures.

ST. MARY'S, ONT. — The new G.T.R. station will be located near the overhead bridge at the head of Queen street.

ESTEVAN, SASK.—The congregation of Westminster church have decided to erect a new manse on the church grounds.

LEAMINGTON, ONT.—The town is offering a loan of $15,000 for the establishment of an American automobile factory here.

ALEXANDRIA, ONT.—E. H. Tiffany has taken tenders for construction of granolithic walks on Bishop and Gernish streets.

HUMBERSTONE, ONT. — A site has been purchased near Lime Kilns for the plant of the Great Lakes Portland Cement Co.

BOND'S CORNERS, ONT. — W. Amos will receive tenders up to September 13th for erection of a new school house here.

DELORAINE, MAN.—The Dominion Bank will erect a new building, 2-story, 50 by 28 feet, of cut stone and red pressed brick.

ST. JOHN. N.B.—The Minister of Railways and Canals announces plans for double tracking of the I.C.R eastward from this city.

LONDON, ONT.— The Sovereign Bank have purchased the site, corner Dundas and Richmond streets for a new bank building.

DIDSBURY, ALTA. — The Public School Board are having plans prepared for a new six roomed school building to be erected here.

BROOM HILL, MAN.—W. M. McLean has taken tenders for construction of a 45 feet pile bridge in the Municipality of Albert.

INDIAN HEAD, SASK.—M. McGregor will receive tenders up to September 15th for a heating system for Imperial Hotel.

CHATHAM, ONT.—Tenders will be received up to September 15th for repairs to bridge over Government drain. Plans with W. J. Shreeve.

HEPWORTH, ONT.—Preparations are being made for erection of a new bank building, on the lot adjoining Mr. Cruickshank's store.

HIGHGATE, ONT.—A by-law will be voted on September 20th to raise $4,000 to build municipal hall for the Township of Orford.

MONCTON, N. B. — Tenders are being asked for erecting 9,324 rods of steel wire fencing on the Canada eastern branch of the I.C.R.

TORONTO, JUNCTION, ONT.—Tenders are wanted for erection of three stores and dwelling. Plans at 462 Bloor street west, Toronto.

WINGHAM, ONT. — A. Dulmage will receive tenders up to September 21st for purchase of $15,000 four per cent. high school debentures.

COBOURG, ONT.—D. H. Mindker, Town Clerk, will receive tenders up to September 17th for construction of 10,000 feet of cement sidewalks.

GODERICH, ONT. — The Lloyd Manufacturing Co., of Minneapolis, are negotiating with the town for privileges to establish a factory here.

VICTORIA, B.C.—Lieutenant-Governor Dunsmuir has donated $10,000 for a sanitarium for consumptives provided an additional $50,000 is raised.

WOODSTOCK, ONT.—The Public School Board have appointed a committee to look for a site for a new building to replace Delatre street school.

COLLINGWOOD, ONT. — C. W. Pitts, manager of Collins' Inlet Lumber Co., intends building a new residence, corner Third and Oak streets.

KENORA, ONT.—A by-law has been carried to provide for the development of water power on the east branch of the Winnipeg river, cost $200,000.

PIERSON, MAN.—W. Mundell will receive tenders up to September 15th for completion of drain in drainage district No. 1 Municipality of Edward.

PORT COLBORNE, ONT. — The time for receiving tenders for the erection of a residence for A. C. Cross has been extended until September 20th.

KAMLOOPS, B. C.—Tenders have been taken for the erection of an eight-roomed public school building. W. T. Whiteway, architect, Vancouver.

LACOMBE, ALTA.—A. M. McDonald will receive tenders up to September 25th for the purchase of $30,000 Nelson school district debentures.

GRAVENHURST, ONT. — T. T. Simpson, C. E., Ottawa, has been engaged as engineer for the development of a water power for the town, for electrical purposes.

KINGSTON, ONT.—The new Biological building for the Queen's University will be erected at the northwest corner of the University property.

ALDERGROVE, B.C.—N. F. McKay, Lands and Works Department, Victoria, has taken tenders for the erection of a school house at South Dunach.

ST. GEORGE, N.B.—The St. George Pulp and Paper Co., are preparing to erect a large concrete and iron lumber mill to replace the one recently burned

OSHAWA, ONT.—W. S. Bowden, Town Engineer, will receive tenders up to September 22nd for construction of granolithic sidewalk on Court and Emma streets.

DORCHESTER, ONT.—W.B. Lane, Township Clerk, has taken tenders for construction of a re-inforced concrete bridge, on Hamilton road, opposite lot 17, Con. A.

EDMONTON, ALTA.—Dr. Whitelaw will build a brick residence corner McKay and Third streets.—James Green will build a two-story residence on Sixteenth street.

MEDICINE HAT, ALTA.—It is expected that an English syndicate will erect a large sugar beet factory here.—The work on building the new canning factory will soon begin.

PETERBORO, ONT.—A by-law is to be voted an to grant privileges to the Rapid Tool Co. to locate here.—Dixon Park has been chosen as the site for the new Normol school building.

BELLEVILLE, ONT.—It is said that negotiations are in progress for the purchase of old Pitceathly terrace, on Dundas street, the intention being to fit up the property as apartment houses.

STRATFORD, ONT. — J. Russell, architect, has prepared plans for a large planing mill, on Milton street, for T. M. Ruston. The building is to be two-story of white brick, 125 by 65 feet, cost $10,000.

GLAGE BAY, N. S.—It has been proposed to extend the building of the wireless station here and add a mechanical department for the manufacture of Marconi apparatus, cost about $40,000.

MCKELLAR, ONT.—A. T. Hazelhurst will rec ive tenders up to September 20th foeerection of a frame school house S.S. No. 3, McKellar township. Plans with R. S. Jackson, Box 463, Parry Sound.

PORT ARTHUR, ONT.—T. Hanley, architect, has taken tenders for addition to block on Lorne street occupied by F. Witherspoon, also for construction of concrete foundation wall for St. Andrew's church.

PARRSBORO, N.S.—The Colchester Coal and Railway Co. will receive tenders up to September 29th for construction of four miles of railway from De Bert station to De Bert coal mines, also for 10,400 sleepers.

CALGARY, ALTA.—The Dominion Meat Co., Limited, have made preparations to erect a three-story brick and stone block, 60 x 125 feet, on the site of of their present building, cost $45,000. Hodgson, & Bates, architect.

NELSON, B. C.—F. M. Rattenbury, architect, Victoria, has been instructed to prepare plans for a new Court House, cost about $65,000.—Plans have been prepared for a new building 50 x 100 feet for the Nelson Iron Works.

ST. BONIFACE, MAN.—T. Bertrand has taken tenders for asphalt block pavement on Provencher avenue.— By-laws have been carried to raise $100,000 for school purposes and $1,000 for bridges over the Red and Seine rivers.

QUEBEC, QUE.—Mr. Nadeau will

Cause and Effect

users of the

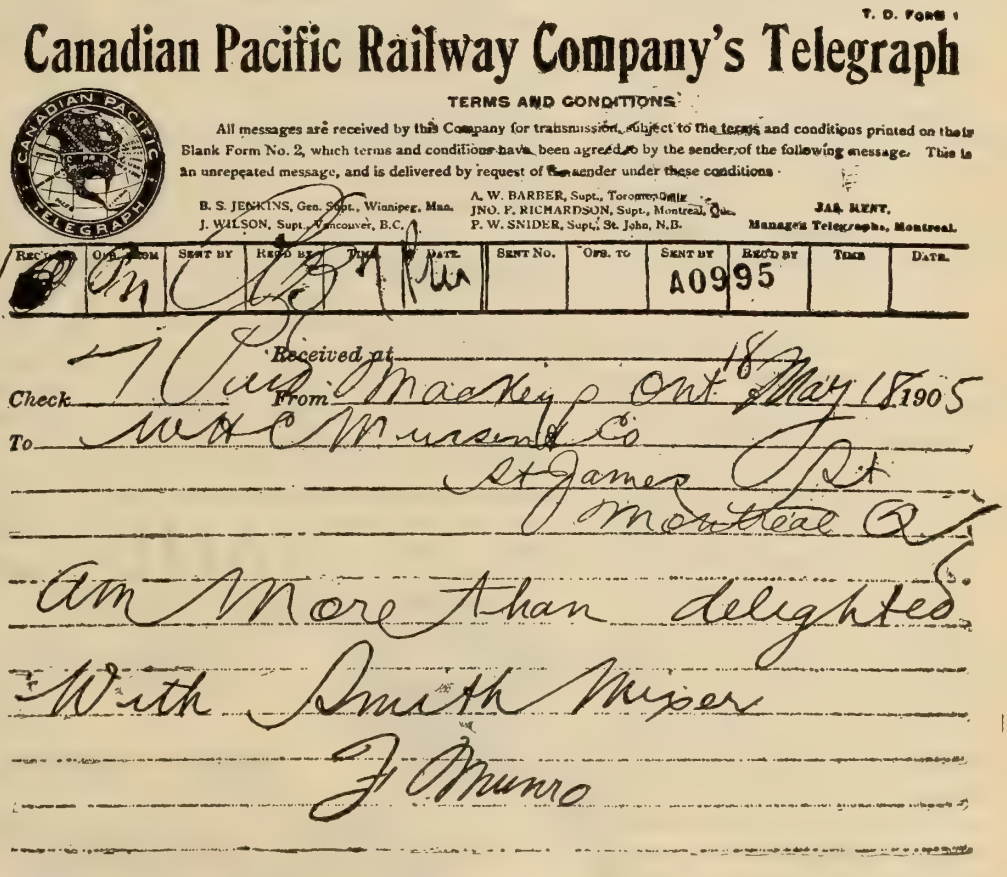
SMITH CONCRETE MIXER

are universally in favor of this make of machine

BECAUSE

the SMITH will stand more use than any other machine and turns out a thorough mixture in a short time.

Twice as many in use as of any other make, and never known to fail.



T. D. Form 1

Canadian Pacific Railway Company's Telegraph

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J. WILSON, Supt., Vancouver, B.C. JNO. F. RICHARDSON, Supt., Montreal, Que. P. W. SNIDER, Supt., St. John, N.B.

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Am More than delighted
With Smith Mixer
J Munro

W. H. C. MUSSEN & CO.

Railway, Mining and Contractors' Supplies

MONTREAL

have his building corner St. Francois and Bridge streets, repaired, cost $3,000.—The managers of the Kent House are considering extensive improvements in that building before next season.

HALIFAX, N.S.—The City Engineer has reported on the cost of constructing sidewalks, etc., on the following streets: Gerrish street, $13,809; Cornwallis street, $11,407; Russell street, $6,253; Young street, $7,100; Kaye street, $6,933.

BATTLEFORD, SASK. — Tenders are requested for the erection of a combination dwelling 64x100 feet on the Estancia Trakehnen. Information obtained from J. H. Koll, Devonshire Stock Farm or H. T. Koll, MacGregor Man.

INNISFAIL, ALTA.—S. P. Fream has advertised for competitive plans from architects for an eight-roomed school building for S. D. No. 210.—A public hall will be erected at Lake View. G. McComb and S. Moore are promoters

WYOMING, ONT.—Tenders will be received up to September 15th for construction of the Green drain, plans for which are with Jas. McLean, Jr., Camlachie; also for the Robertson-Parker drain, plans with Robert Hart, Kertch.

ARNPRIOR, ONT. — Plans have been prepared for the new buildings etc., for the Exhibition grounds.—The Arnprior Clothespin & Woodenware Manufacturing Co. are applying for incorporation and will proceed to erect a new factory.

DALHOUSIE, N.B.—C.H. La Billois, Department Public Works, Fredericton, will receive tenders up to September 17th for repairing Roherty bridge, Restigouche county. Plans at Department, at store of P. Ultican, Supt., Jacquet river, and at office of Dalhousie Mercantile Co.

JERSEY COVE, N. S.—F. Gelinas, Department of Public Works, Ottawa, will receive tenders up to September 28th for construction of a wharf and approach. Plans with C. E. W. Dodwell, Halifax; E. G. Millidge, Antigonish, at the Department and with Postmaster here.

GORDON, ONT.—A. C. Mailloux, Township Clerk, will receive tenders up to September 25th for the construction of a steel bridge over the Grand river on the Front road, Anderton township. Bridge to be 140 feet long on concrete abutments, set upon foundations of piles.

NEW WESTMINSTER, B. C.—It has been announced that an addition will be made to the asylum, for which tenders will be called soon.—Property owners on Columbia street are discussing the construction of cement sidewalks and block pavement on the business portion of that street.

MOOSE JAW, SASK.—Tenders have been taken for the erection of a Methodist church on section 22-13-25.—Jones & Bunyard, architects, have taken tenders for erection of a residence on Fairford street east.—A by-law has been carried for the expenditure of $90,000 for waterworks extension.

LETHBRIDGE, ALTA.—The city gives notice of its intention to construct sewers in Ashmead, Glyn, Crabb and Burdett streets.—E. U. Rylands has purchased a site on Crabb street for new residence.—It is stated that Spout, Waldron & Co., Minneapolis, will erect a new flour mill here.

BRANDON, MAN.—An agreement has been made between the city and the C.N.R. by which a new station will be built, cost $25,000.—Plans for the new armouries have been prepared and tenders will soon be called for its construction. It will be three stories containing a drill hal 85 x 120 feet.

MIDLAND, ONT.—T. J. Trueman, Town Clerk, will receive tenders up to September 25th for $30,000 4½ per cent. town debentures.—The G.T.R. have filed plans with the Minister of Public Works for increased elevator capacity at Tiffin. They also contemplate double tracking the line from this town to Port Huron.

MONTMAGNY, QUE.—F. Gelinas, Department of Public Works, Ottawa, will receive tenders up to October 1st for construction of a wharf at this place. Plans at the Department, with Postmaster here and at offices of C. Desjardins, Clerk of Works, Post Office, Montreal, and Ph. Beland, Clerk of Works, Post Office, Quebec.

HAMILTON, ONT. — Lancaster Township Board of Health have given consent to the Hamilton Health Association to build a consumption sanitarium in the township.—Tenders have been taken for construction of sewers on King, Harvey, Kent and John streets and Ferguson and Louise avenues.—The new theatre for the Bennett Amusement Co. will be erected in connection with the terminal station at the corner of Main and Catherine streets.

SASKATOON, SASK.— The plans for the new Christ's church prepared by C. Cordery, architect, provide for a stone building 175 feet long, transept 75 feet wide and nave 64 feet wide, seating capacity about 1,000, to be situated on Twentieth street. — Subscriptions are being solicited for the new hospital building, estimated cost $20,000.—The city will soon ask for tenders for $125,000 waterworks and sewer debentures.—The erection of new Municipal buildings is being considered.

MONTREAL, QUE.—William Clark, pork packer, is preparing to erect a new factory at 83 Amherst street, cost $28,000. — The Roman Catholic Commissioners have decided to erect two new schools, corner St. Paul and Chaboillez street, the new structures to be solid brick and stone, three-stories high, estimated cost $60,000. — Plans have been prepared for the new Bonaventure depot and hotel on Chaboillez street. The new building for the Eastern Townships Bank on the site of the old Morgan block, St. James street, is to be ten-stories high, cost $500,000.

VANCOUVER, B.C.—Sam Sing has plans prepared for three-story and basement brick block, corner Carrall and Pender streets, cost $20,000. — The Salvatfon Army are looking for a site for location of new barracks.—Plans have been prepared for a new factory for Barber & Co. on Dufferin street.—Plans are being prepared for the V. W. & Y. Railway bridge across the Second Narrows.—It is reported that a large departmental store will soon be erected on Hastings street between Burrard and Granville streets.—Building permits have been granted to the Byrne Estate for alterations to block on Carrall street, cost $1,900, to Mrs. G. Martin for building on York street, cost $2,000, and to Cavanagh & Holden for improvement of Alberta Hotel on Pender street, cost $23,000.

WINNIPEG, MAN.—C. J. Brown, City Clerk, will receive tenders up to September 24th for supply of 7,500 feet of 3½ inch cotton rubber lined hose for fire service. — W. S. Rector, of the Standard-Gillett Light Co., Chicago, is considering the establishment of a factory here.—I. Rossen has purchased a lot at the foot of Beaconsfield street on which it is understood a distillery will be built.—It is expected that the incinerator will be built on Ross avenue and that work will soon start.—Tenders are being taken this week by the Parks Committee for the erection of iron fencing set in granolithic base.—J. W. Breakey, Secretary-Treasurer, Municipality of Glenwood, will receive tenders up to September 22nd for the purchase of $4,500 5 per cent. debentures.—Mr. Aldershaw, architect, is preparing plans for an extension to apartment block on Sargent ave., for Mr. Coolidge.—H. Rugh, architect, is preparing plans for an apartment block on Rose ave., for Fort Rouge Building Co., cost $35,000, also for a warehouse on Princess street, cost $75,000.—Subscriptions are being solicited for a summer church at Winnipeg beach for Catholic cottagers.—It is reported that certain islands in Lake-of-the-Woods have been purchased by St. Paul and Minneapolis capitalists for a summer hotel.—The Works Committee have taken tenders for asphalt pavement on Martha street and Buell ave., also for macadam pavements, sewers and granolithic walks.—The plans for the new bridge at Kildonan ferry show a structure 30 feet above summer level of Red river, swinging portion to be operated by electricity.

TORONTO, ONT. — H. Simpson, architect, is taking tenders for erection of hotel building, corner King & Sumach streets, also for house on Wellesley street.

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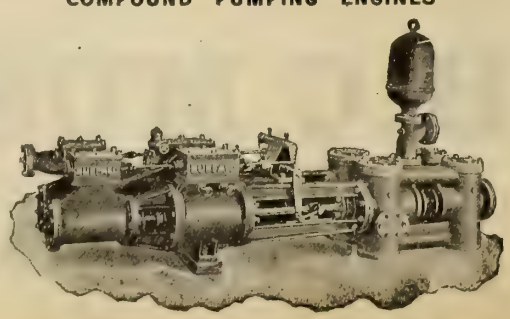
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—J. P. Hynes, architect, is preparing plans for alterations to the Ayer House, Eastern avenue, Brockton Club House Hotel, Dundas street and Devaney Hotel, corner Bathurst and Bloor. — Same architect is preparing plans for residence in North Toronto, cost $15,000, also for three dwellings at Kew Beach.—J. Francis Brown, architect, is calling for tenders for erection of a residence on South Drive, Rosedale, also for brick and frame church on Pape avenue.— The Board of Control will receive tenders up to September 18th for construction of asphalt pavements on McMurrich, Gerrard, Maude and Tacoma streets, for vitrified block pavement on Berkeley street, also for a number of concrete sidewalks and sewers. Tenders will also be received at the same office for complete removal of buildings on Nos. 142 to 156 Adelaide street west.— A. G. Strathy & Co. are having plans prepared for a new store building, corner Bay and Queen streets.- The Chemical Laboratories, Limited, have secured a site on Vanhorne street for new factory building for the manufacture of light

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chemicals.—Tenders are wanted for carpenter work, plastering and painting required in the alteration of two houses on Bleecker street. Information at 53 Boswell avenue.—The Board of Control have taken tenders for additions and alterations to No. 1 freight shed on Block D Harbor square.—The parishioners of St. Francis R. C. church, Arthur street, have decided to build a new residence for the Priest, on the site behind the church.—The Globe Printing Co. have purchased a site on Yonge street running through to Jordan street for their new offices.—Tenders and estimates are wanted for putting store fronts in two buildings. Apply 92 Bond street — Property on Yonge street near DeLisle street has recently been sold which it is supposed will be a site for new car barns for the Metropolitan Railway Co.—It is stated that the Keystone Amusement Co., of Pittsburg, Pa., have purchased the property 78 to 84 Richmond street west as a site for a new Burlesque theatre.—Building permits have been issued as follows: A G. Gougle, 2-story and attic brick dwelling, corner Roxborough street and Chestnut Park drive, cost $11,800; Avenue road Presbyterian church, 2-story stone church, corner Avenue road and Roxborough avenue, cost $45,000; R. S. Nichols, 2-storey brick store College street, near Ossington avenue, cost $5,000; McMaster Science building, 5-story brick and stone science building, Bloor street, near Avenue road, cost $50,000; Geo. Robinson, 2-story brick dwelling, 2 Beaumont road, cost $29,000; Thos. Crashley, 3-story brick warehouse, 12 Beverley street, cost $6,000; A. J. Mitchell, 2-story brick dwelling, Walmer road,

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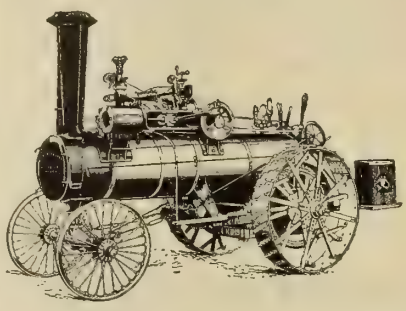
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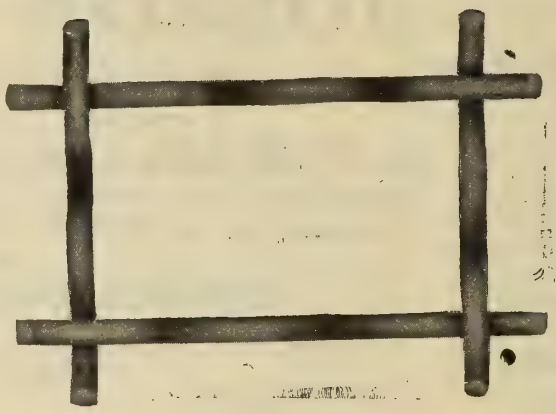
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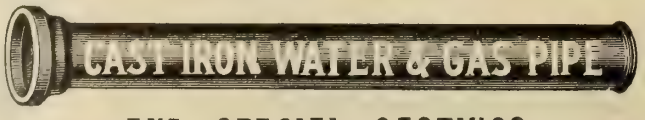

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near Bernard avenue, cost $5,000; Crown Bank of Canada, 1-story brick addition to bank, 34 King street west, cost $5.000; S. Bartello, 3-story stone and brick dwelling, Arthur and Beatrice streets, cost $5,000; H. C. Mainprice, 2-story brick dwelltng, Bank street. cost $4,500; W. J. Wilkinson, 2-story brick store and dwelling, corner Emerson and Wallace avenues, cost $3,000; G. A. Griffin, 2½-story brick dwelling, Palmerston boulevard, near College street, cost $6,000; Mrs. J. E. Legge, 2-story store and dwelling, 818 College street, cost, $4,000.

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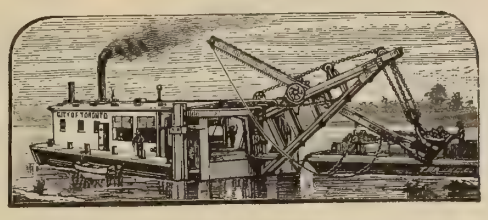

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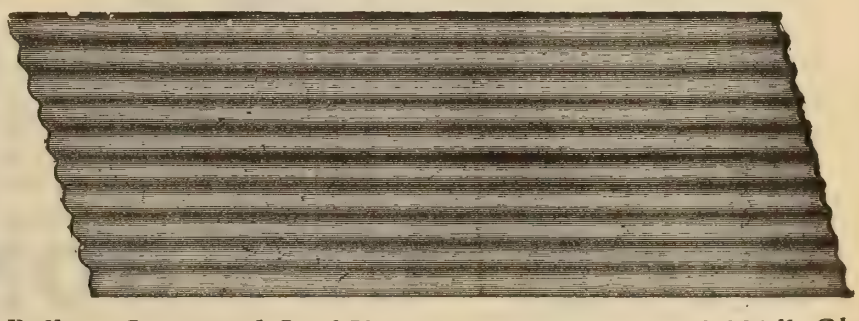

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CONTRACTS AWARDED.

INDIAN HEAD, SASK. — $149,985 town debentures: Wood, Gundy & Co., Toronto, purchasers.

EGLINTON, ONT.—Erection of new water tower: Po'son Iron Works, successful tenderers, cost $7,040.

ST. MARY'S, ONT.—Erection of new post office building: Robert Cameron, Almonte, contractor, cost $22,000.

NEW WESTMINSTER, B. C.—Erection of new Public school at Millside: J.A. Ferbrache, Vancouver, contractor.

BRADFORD, ONT.—Construction of swing bridge over the Holland river: Substructure, D. Conroy & Sons, Peterboro; superstructure, Dominion Bridge Co.

CALGARY, ALTA.—Construction of new Y.M.C.A. building: Thomas Underwood, contractor, cost $55,000, exclusive of plumbing and heating.—Excavation of new dry goods warehouse for the W. R. Brock Co., Toronto: Alberta Building Co., contractors.

MONTREAL, QUE.—The C.P.R. have placed an order with the American Locomotive & Machine Works, at Longue Pointe, for 50 locomotives to cost $19,000 each.

NIAGARA FALLS, ONT. — W. S. Homan has secured contracts for building residences on St. Clair avenue for Mrs. R. Green and E. A. South.—Erection of Ramapo Iron Works buildings: H.B.Symmes, contractor.

STEELTON, ONT. — Contracts for waterworks construction were let as follows: Pipelaying, John F. Connolly, Toronto; pipe and specials, Gartshore, Thomson Co., Hamilton; valves and hydrants, Kerr Engine Co., Walkerville. Total cost $100,000. Willis Chipman, Toronto, Engineer.

SAULT STE. MARIE, ONT. — The contract for Section K of the Sewerage System was awarded to J. H. McKnight, of Toronto, cost $33,000. Other tenderers were John F. Connolly, Toronto, Boyle Bros., Sault Ste. Marie, Ont., and T. A. Jemison, Sault Ste. Marie, Ont. W. F. Grant, Engineer.

PORT ARTHUR, ONT.—Construction of railway from Nepigon to Lake Nepigon: Central Contracting Co., contractors.—Extension of electric power plant: 1,300 h.p. electric generator, Allis-Chalmers-Bullock; 1,300 h. p. water equipment, Jenckes Machinery Co.; material for building six foot flume 2,000 feet long, Canadian Pipe Co., Vancouver.

PORT ELGIN, ONT.—The following contracts were awarded for construction of waterworks: Pipelaying, John F. Connolly, Toronto; pumping machinery, Smart-Turner Machine Co., Hamilton, Ont.; steel storage tank, Hunter Bridge Co., Kincardine, Ont.; cast-iron pipe, Gartshore, Thomson Co., Hamilton; hydrants, valves, etc., Canada Foundry Co., Toronto. Total cost $35,000. Willis Chipman, C.E., has charge of work.

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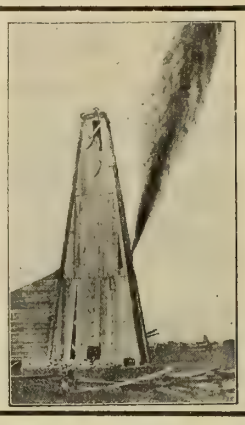

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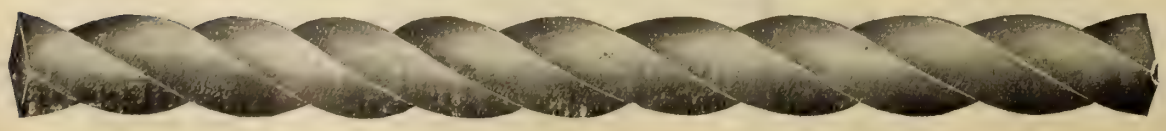

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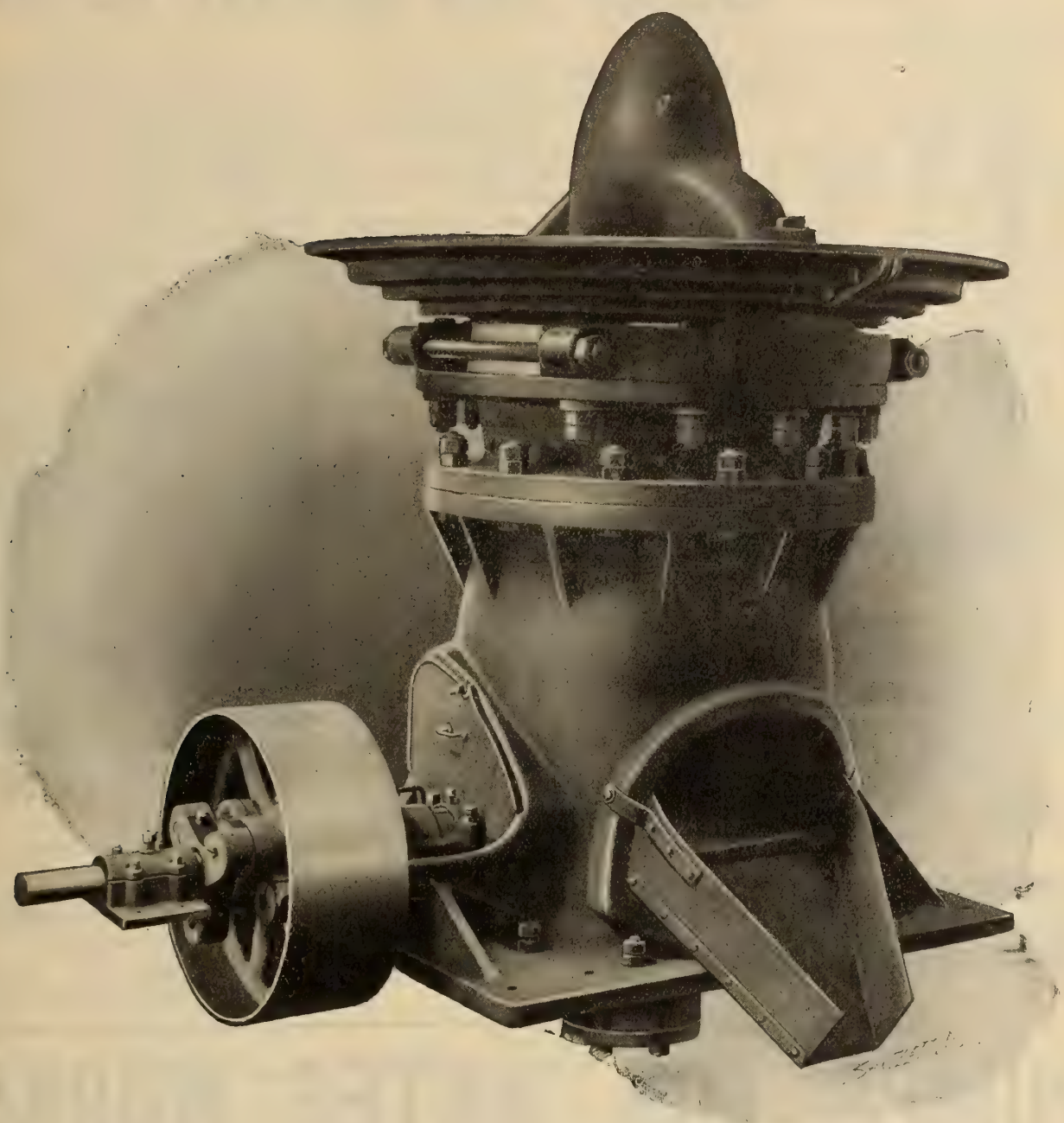

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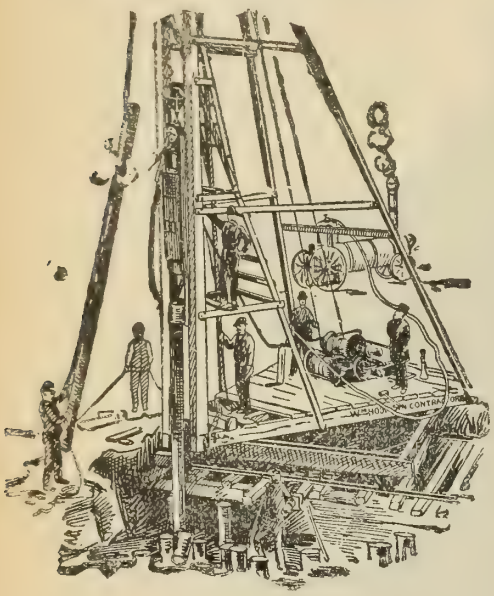

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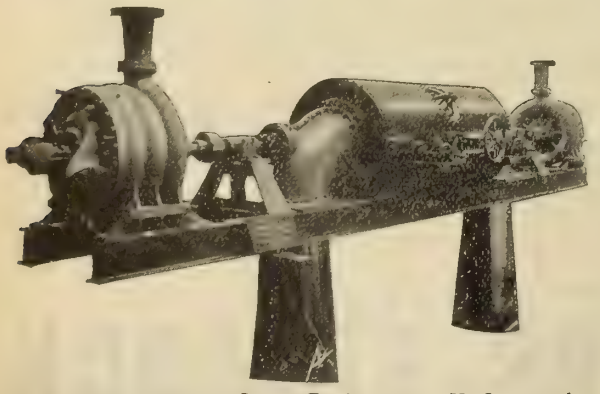

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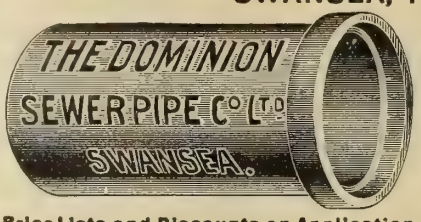

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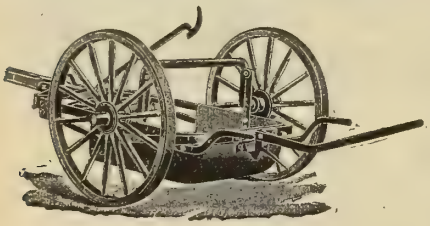

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							Neat.					3 (Sand) to 1 (Cement)				
					Initial	Final	1 dy.	7 dys	28 dys.	3 mos.	1 yr.	1 dy.	7 dys.	28 dys.	3 mos.	1 yr.
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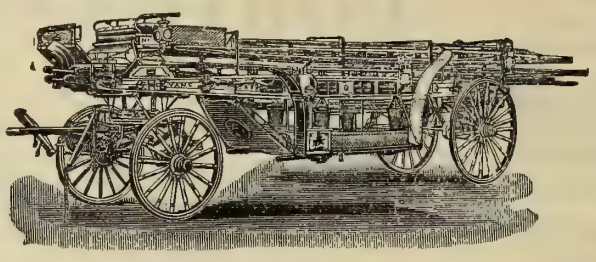

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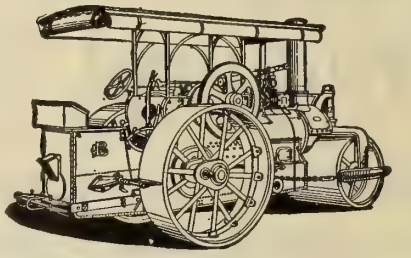

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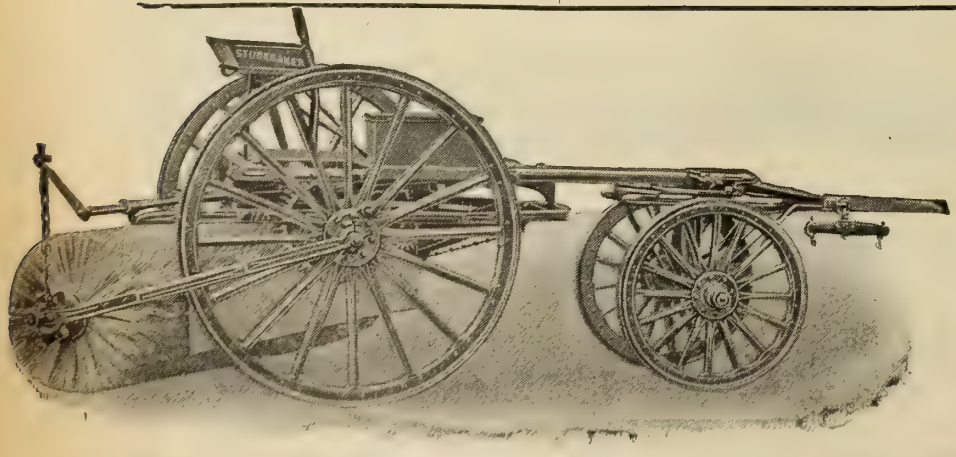

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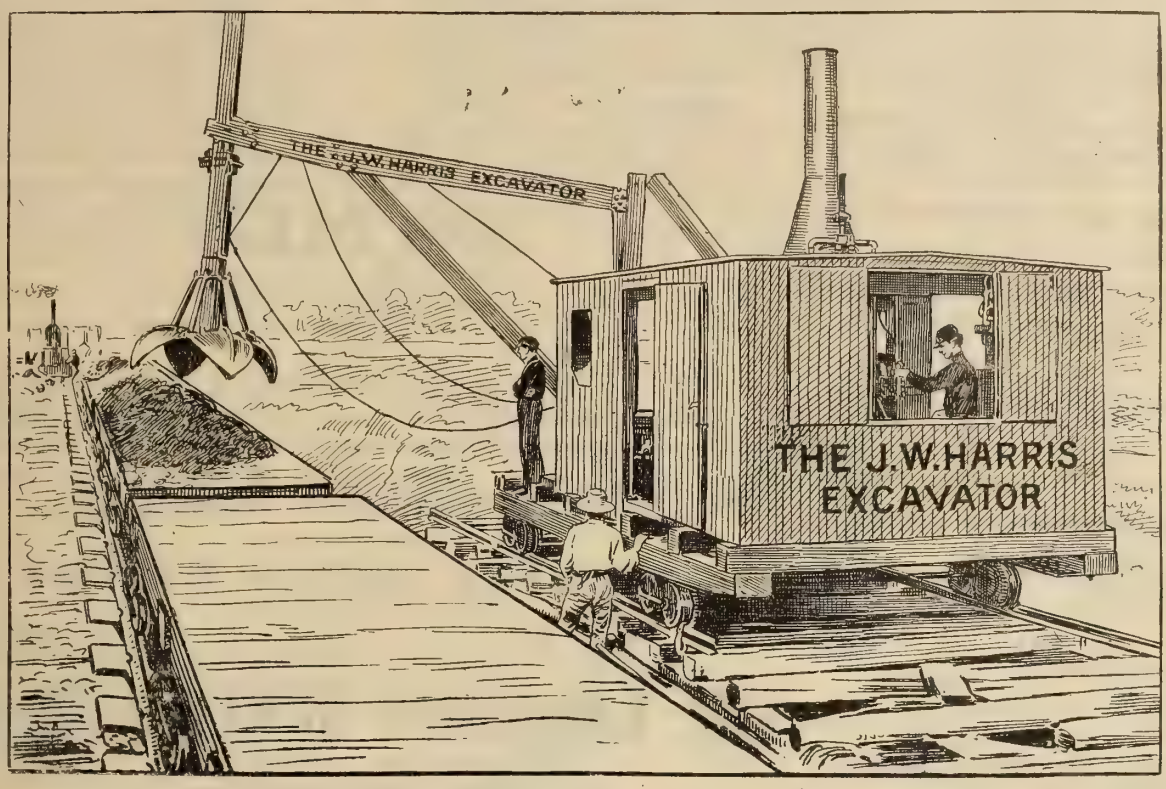

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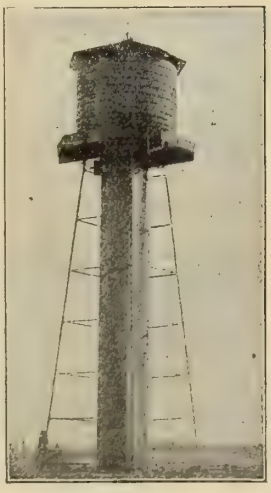

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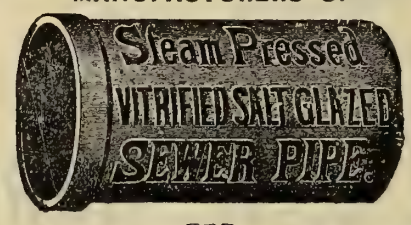

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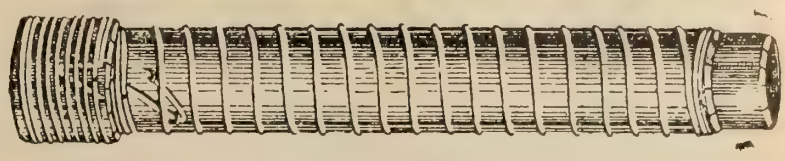

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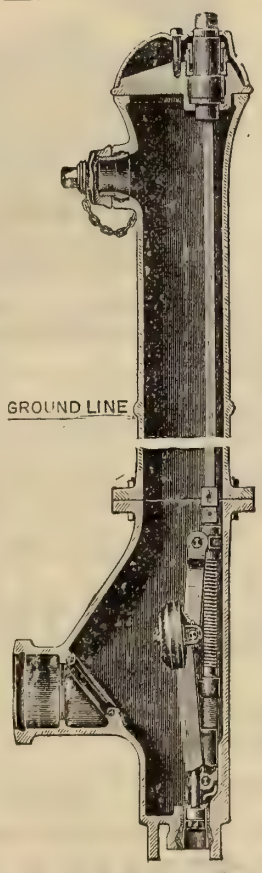

WATERWORKS SUPPLIES
HYDRANTS — VALVES
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STEAM PUMPS
PUMPING MACHINERY
Specification Respectfully Solicited.

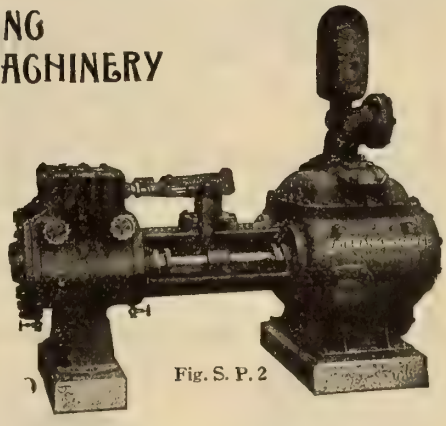

Fig. S. P. 2

The Canadian Fairbanks Co., Limited
MONTREAL TORONTO WINNIPEG VANCOUVER

"RAVEN" PORTLAND CEMENT
— Unexcelled for Strength and Uniformity —
RAVEN LAKE PORTLAND CEMENT CO.
Limited
Long Distance Telephone: RAVEN LAKE, ONT. Telegraph and Post Office Address: VICTORIA ROAD, ONT.

SIMPSON & LEWIS
Civil Engineers

Electric, Hydraulic Plants, Waterworks, Sewerage, Bridges.

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Contractors to H. M. Governments

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WIRE ROPES for Cableways, Aerial Ropeways, Elevators, Cranes, Derricks, Pile Driving, Drilling, etc.

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Is the recognized Standard Hydrant, and is the easiest Hydrant to keep in order.

Our Hydrants are thoroughly tested before shipment, and are of substantial proportions and weight.

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Telegraphic Address: "Dredging" Fairfield Building, VANCOUVER, B. C.

ENGINEERS and CONTRACTORS

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Bridges
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Harbor Works
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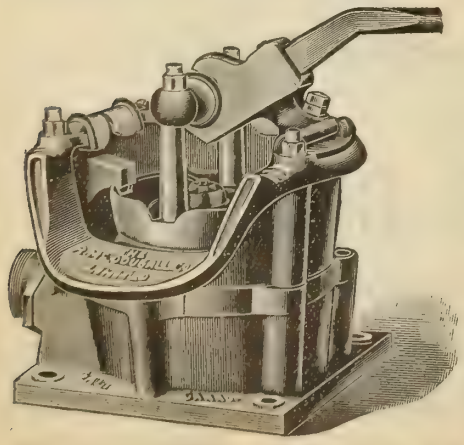

DIAPHRAGM PUMPS

For Contractors' Use.—This class of pump will handle about anything that is wet and their usefulness has been shown in thousands of cases. We try always to have a few on hand for Emergency orders, also extra Diaphragms and 3" Suction Hose and Fittings.

Try us once if in a hurry or even if you have lots of time.

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Manhole Covers and Frames,
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CANADA FOUNDRY COMPANY LIMITED.
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Special Castings,

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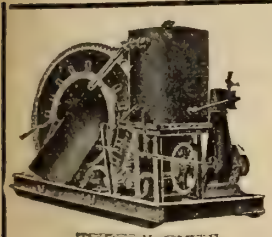
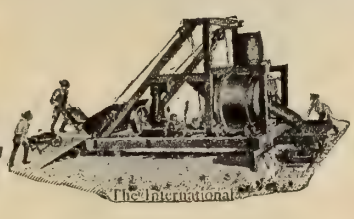
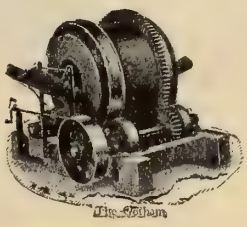
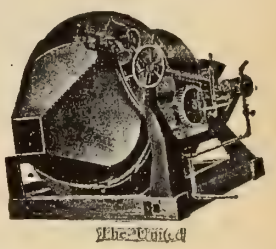
District Offices: MONTREAL, HALIFAX, OTTAWA, WINNIPEG, VANCOUVER, ROSSLAND


The Stein Heated Batch

The Stanley


The International


The Urban


The United

The Kersbaw

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Of 14 distinct types and in many sizes.
Capacity 2 to 75 cubic yards per hour.
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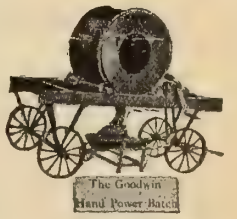
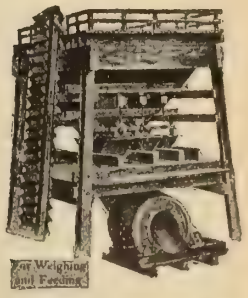
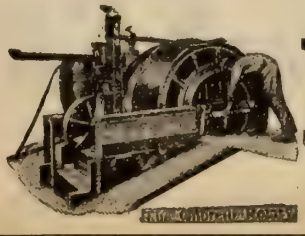
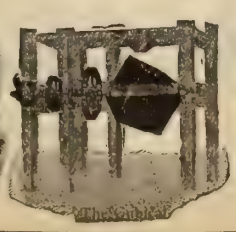

The Goodwin Hand Power Batch

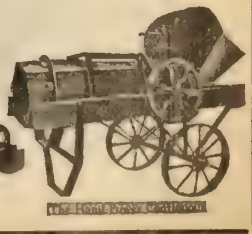

For Weighing and Feeding


The Contractors Mixer

The Gilbreth Accurate Self Measuring Mixer


The Sandy

The Metropolitan Batch


The Portable Mixer

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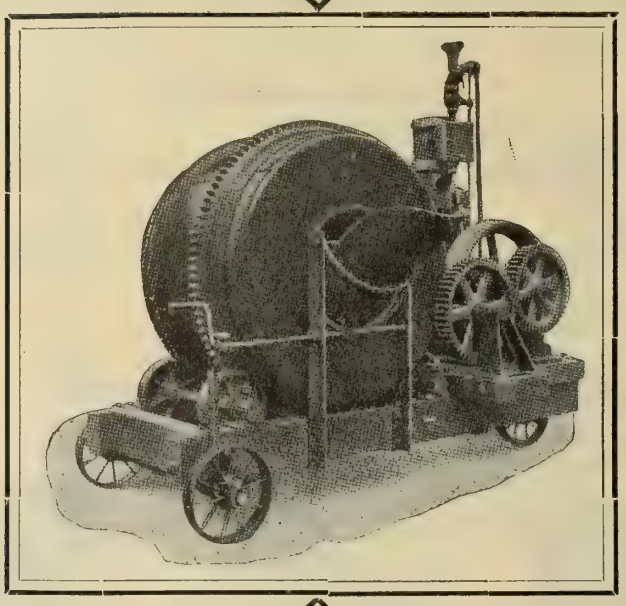
Reliable, Durable, Efficient

and Exceedingly Simple

No intricate parts—Easy to operate—
Up-to-date

Concrete turned out is unexcelled
for strength and uniformity.
Original cost is Low.
Machine is fully
guaranteed.



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our simple discharge arrangement

MIXERS SUPPLIED WITH OR WITHOUT POWER
ALL CAPACITIES—ON SKIDS OR TRUCKS

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CANADIAN

Contract Record

A Weekly Journal of Public Works, Tenders, Advance Information and Municipal Progress

This Paper Reaches Every Week the Town and City Clerks, Town and City Engineers, County Clerks and County Engineers, Purchasers of Municipal Debentures and Leading Contractors in All Lines Throughout Canada

VOL. 17. TORONTO, MONTREAL — SEPTEMBER 19, 1906 — WINNIPEG, VANCOUVER No. 29

THE CANADIAN CONTRACT RECORD
PUBLISHED EVERY WEDNESDAY

As an intermediate Edition of the Canadian Architect and Builder.

THE C. H. MORTIMER PUBLISHING COMPANY
of Toronto, Limited,

Subscription Price, $2 per annum, payable in advance.

CONFEDERATION LIFE BUILDING, TORONTO
Telephone Main 2362.

Branch Offices:
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In Contractor's office, Advertiser has had a number of years' experience, more particularly on the commercial side of the building. C. F. MYERS, 935 Bathurst Street, Toronto.

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We offer for immediate shipment from stock, and subject to prior sale: 10,000 ft. S & F Cast Iron Pipe "MacLarens'," 8" x 45 x 12' o„ Proved to 300 and coated.

L. H. GAUDRY & CO.,
Quebec.

SEALED TENDERS

addressed to D. Doyle, Town Clerk, Hawkesbury, Ont., and endorsed "Tenders for the construction of Macadamized Roadway," will be received until 12 o'clock noon on MONDAY, THE 24TH DAY OF SEPTEMBER, 1906, for the construction of Macadamized Roadway on Main street west, town of Hawkesbury.

Plans and specifications of the proposed work can be seen, and forms of tender obtained at the office of the undersigned.

The lowest or any tender not necessarily accepted.

D. DOYLE,
Town Clerk.

Hawkesbury, Sept. 11, 1906.

TENDERS FOR HIGHWAY BRIDGE

Sealed tenders will be received by the undersigned up to SEPTEMBER 21ST for the construction of a 50 foot reinforced Concrete Arch Bridge in the Town of Oshawa, according to plans prepared by Connor, Clarke & Monds, consulting engineers, Toronto.

Plans and specifications may be seen at the office of the undersigned or of the engineers at 36 Toronto Street, Toronto.

W. S. BOWDEN, Town Engineer,
Oshawa, Ont.

Town North Toronto

Sealed tenders will be received by the undersigned marked "Tenders for Sidewalks" up to 7 o'clock p.m. on WEDNESDAY, 3RD OCTOBER, 1906, for building a Concrete Sidewalk 5 feet in width, on the east side of Yonge street from about the north side of Eglinton avenue southerly to the south limit of the town, except a part to the south of Glenwood avenue, where the present plank walk is on trestles. Also for a Concrete Sidewalk on both sides of Erskine avenue 4 feet in width part way. Also for a Vitrified Brick Sidewalk 4 feet in width on Glengrove avenue from Yonge street westerly to the west side of lot 126, between the south row of double pines.

Plans and specifications can be examined at the Town Hall and specially from 4 to 6 o'clock p.m. on Thursday, 27th September, 1906, when the town engineer will be present to give explanations as to same.

Tenders to be at a rate per lineal foot of 5 feet on 4 feet in width for the concrete walk and at a rate per lineal foot for vitrified brick walk 4 feet in width, in all cases to include lanes, private entrances, road crossings, etc., as per plans and specifications.

A marked cheque for $25 to accompany each tender, to be payable to the undersigned, which to be returned when the successful tenderer enters into contract with the town.

The lowest or any tender not necessarily accepted.

W. J. DOUGLAS, Clerk and Treasurer,
Town of North Toronto.

Eglinton P.O., 17th September, 1906.

TEMISKAMING and NORTHERN ONTARIO RAILWAY COMMISSION.

TENDERS FOR GRADING

Sealed tenders, addressed to the undersigned and marked respectively "Tender for Kerr Lake Branch," "Tender for Charlton Branch" and "Tender for Haileybury Spur," will be received up to 12 o'clock noon, on TUESDAY, OCTOBER 2ND, 1906, for all the work except tracklaying and ballasting connected with the building of the following branch lines, viz.:

1. From the main line near Cobalt to the Kerr Lake region, a distance of approximately four miles.
2. From the main line to a point at or near Haileybury Wharf, a distance of about one and three-quarter miles.
3. From the main line near Englehart to the Village of Charlton, a distance of about eight miles.

Plans and specifications may be seen at the office of the Commission, 25 Toronto Street, Toronto, and at the Chief Engineer, North Bay, Ontario.

Marked cheques payable to the order of the Chairman and Secretary-Treasurer of the Commission must accompany tenders as follows. Kerr Lake Branch, $2,000.00; Haileybury Spur, $500.00; and Charlton Branch, $2,000.00.

Tenders must be made out on the printed form supplied by the Commission.

The commssion will not be bound to accept the lowest or any tender.

H. W. PEARSON,
Secretary-Treasurer,
25 Toronto St., Toronto.

Dated at Toronto, September 10th, 1906.

Papers inserting this advertisement without authority will not be paid for same.

TOWN OF DALHOUSIE

Province of New Brunswick

TENDERS FOR WATERWORKS

Sealed tenders addressed to the Town Clerk of the Town of Dalhousie, New Brunswick, will be received until 7.30 p. m.,

Wednesday, October 3rd, 1906,

for laying about 17,000 feet of conduit pipe, part 12-inch, part 10-inch, and part 8-inch diameter, and for furnishing all materials therefor.

Plans and specifications will be ready for inspection, and may be seen at the office of the Chief Engineer, 103 Bay street, Toronto, or at the office of the Town Clerk, Dalhousie, N. B., on and after September 24th.

No tender necessarily accepted.

Tenders for other sections of the work will be called for at a later date.

WM. S. MONTGOMERY, Esq.,
Mayor, Dalhousie, N. B.
ALEX. J. LE BLANC, Esq.,
Town Clerk, Dalhousie, N. B.
W. E. DOUGLAS,
Resident Engineer, Dalhousie, N. B.
WILLIS CHIPMAN,
Chief Engineer, 103 Bay St., Toronto.

Toronto Public Reference Library

Tenders for Building

Sealed tenders, endorsed on envelope, "Tender for the Public Reference Library Building, Toronto," and addressed to C. Egerton Ryerson, Esq., Secretary-Treasurer of the Toronto Public Library Board, corner Church and Adelaide streets, Toronto will be received until noon on OCTOBER 10TH for work and materials required in the erection of the Toronto Public Reference Library building for the board of the Toronto Public Library. Tenders may be lump or separate, the works proposed including the following: Excavation, masonry and brickwork, reinforced concrete and paving, terra cotta, carpentry, painting and glazing, plastering, roofing and sheet metal work, steel, electric wiring, stacks, plumbing and heating, elevators. Plans and specifications may be seen and forms of tender obtained at the office of the architects, Wickson & Gregg, and A. H. Chapman, 59 Yonge street, Toronto. Each tender must be accompanied by a marked cheque, payable to the order of the Toronto Public Library Board, equal to 2½ per cent. of the amount of the tender, which will be subject to forfeiture in case of failure on the part of the contractor to enter into a written contract with approved sureties if called upon to do so. The board reserves the right to reject any or all tenders or to accept any tender that appears advantageous to the board.

C. EGERTON RYERSON,
Sec.-Treas., Toronto Public Library Board, corner Church and Adelaide streets.

Toronto, September 14, 1906.

[FOR ADDITIONAL ADVERTISEMENTS FOR TENDERS SEE NEXT PAGE.]

TENDERS

will be received for the different trades required in the erection of a

CONCRETE FACTORY BUILDING

near the Don for the Carriage Mountings Company.

Plans at office of **John S. Fielding**, Consulting Engineer, 15 Toronto street. Tenders to be in by SEPTEMBER 20TH, 1906.

Tenders at same time for **Air Compressor, Pneumatic Tools and Appliances.**

TOWN OF DUNNVILLE

PROVINCE OF ONTARIO

WATER WORKS EXTENSIONS

Sealed tenders will be received by the town clerk uutil 8 p.m.

TUESDAY, OCTOBER 2ND, 1906

for laying about 7,000 lineal feet of water mains also for furnishing all materials therefor.

Plans, specifications, etc., may be seen at the office of the Chief Engineer, 103 Bay street, Toronto, and at the Town Clerk's office, Dunnville, on and after September 20th.

No tender necessarily a cepted.

WILLIS CHIPMAN, Chief Engineer,
103 Bay Street,
Toronto, Ont.

J. W. HOLMES, Esq.,
Town Clerk,
Dunnville, Ont.

CONTRACTS OPEN.

HOMER, B.C.—The C.P.R. intend erecting a saw mill here.

ARCOLA, SASK.—The erect on of a new brick flour mill is being considered.

CARGILL, ONT.—Dr. C. C. Tatham is having plans prepared for a new residence and office.

HALIFAX, N.S.—It is proposed to establish a car manufactnrlng plant here. H. McInnes is interested.

CHATHAM, ONT. — Philadelphia capitalists are considering the establishment of an oil refinery here.

GLACE BAY, N. S.—M. F. McNeil has this week taken tenders for erection of a Central school building.

YORKTON, SASK.—A by-law is to be voted on to spend $90,000 on sewers, waterworks and telephones.

SANDWICH, ONT.—G.E. Smeaton, town clerk, is offering $6,000 4½ per cent. town debentures for sale.

WESTPORT, ONT.—W, McKnight will receive tenders up to October 20th for purchase of $1,751.85 debentures.

MOOSE JAW, SASK.—OnSeptember 28th a by-law will be voted on to raise $19,000 for the erection of a fire hall.

LETHBRIDGE, ALTA.—The Columbia Milling Co., Enderby, B. C., are considering the erection of a flour mill here.

MONCTON, N. B.—It is understood that John Townes will erect a two-story brick building corner Church and Main streets.

ESTEVAN, SASK.—The C.P.R. are planning to build additional freight sheds and make other improvements here, cost $30,000.

MEAFORD, ONT.—G. G. Albery, Town Clerk, has this week taken tenders for construction of sewer works, etc., in the town.

KENORA, ONT. — The Board of Education have decided to erect a High school building on the site of the North Ward school.

CROWLAND, ONT.—It is understood that forty dwellings will be built here for employees of the Ontario Iron & Steel Co.

KAMLOOPS, B. C.—J. J. Carment, city clerk, will receive tenders up to September 25th for supply of sewer pipe and connections.

HAWKSVILLE, ONT.—Thos. Wilkinson will receive tenders up to September 20th for purchase of $1,500 five per cent. debentures.

NANAIMO, B. C.—A. R. Johnson is one of the promoters of a scheme to establish a large cold storage plant here, cost about $50,000.

PORT ARTHUR, ONT.—The C. P. R. purpose building a larger station here than was first proposed and have cancelled the old plans.

DIGBY, N.S.—The British American Oil & Fertilizer Co., of Cleveland, Ohio, have secured a site at Joggin Bridge for establishment of a plant.

WIARTON, ONT.—W. J. Ferguson, Town Clerk, will receive tenders up to October 1st for purchase of $13,759.04 4½ per cent. debentures.

PORT MOODY, B.C.—John McLean has purchased a site on the waterfront where he purposes erecting a new shingle mill to cost about $10,000.

BOISSEVAIN, MAN.—C. Goddardt, Winnipeg, has submitted a report to the Town Council on the proposed waterworks and sewerage systems.

BROCKVILLE, ONT.—B. Dillon, architect, is calling for tenders for additions to building on King street to be occupied by A. T. Wilgress.

NIAGARA FALLS, ONT.—The by-law has been carried in Stamford township to grant privileges to the Ramapoison Works to locate there.

GODERICH, ONT.—The G. T. R. have decided to remodel the terminal here. Larger freight sheds will be built and other improvements made.

MARKHAM, ONT. — The Town Council have decided to have a by-law prepared to provide for $8,500 debentures for rebuilding the public school.

AURORA, ONT.—S. H. Lundy, Town Clerk, will receive tenders up to October 1st for purchase of $10,000 4½ per cent. waterworks debentures.

BERLIN, ONT.—The Town Council negotiating with a company for the establishment of agricultural machiney manufacturing works to cost $300,000.

FERGUS, ONT.—The Council have decided to submit a by law to the ratepayers to provide for the expenditure of $40,000 on a system of waterworks.

LONDON, ONT.—A. O. Graydon, City Engineer, will receive tenders up to September 20th for construction of tile sewers on Teresa and Oxford street.

QUYON, QUE.—It is not expected that the Dowd Milling Co., will rebuild their elevator and mill on the old site as the company have another one in view.

LEAMINGTON, ONT.—On September 24th a by-law will be voted on to loan $30,000 to W. C. Campbell, Detroit, to establish an automobile factory here.

AYLMER, QUE.—E. J. Rainboth, C. E., has prepared plans for new sewerage system at an estimated cost of $46,000. The plans met the approval of the Town Council.

FORT WILLIAM, ONT.—The Coats Manufacturing Co. of Canada, Limited, have decided to locate their works and head office here for the manufacture of carpets, art publications, etc.

BEAMSVILLE, ONT.—The stockholders of the Hamilton, Grimsby and Beamsville Electric Railwayare considering the extension of the line from this town to St. Catharines.

GANANOQUE, ONT.—W. Lindsay, of the firm of Henderson & Lindsay, has purchased a site at the foot of Charles street which it is understood will be for a new business establishment.

PRINCE ALBERT, SASK.— The City Council gives notice of its intention to construct granolithic sidewalks on Central avenue, cost $12,700, and on First avenue west, cost $4,263.

NORTH TORONTO, ONT.—The Ontario Railway and Municipal Board have approved of a by-law to raise $7,200 for the construction of steel reservoir and other improvements to water works system.

MASSEY, ONT. — Robert Wright, town clerk, will receive tenders up to October 2nd for purchase of $10,000 waterworks debentures and $4,000 public school debentures, bearing interest at 4 per cent.

DALHOUSIE, N. B.—Alex. J. Le Blanc, Town Clerk, will receive tenders up to October 3rd for laying 17,000 feet of conduit pipe. Plans with W. Chipman, C. E., 103 Bay street, Toronto,and with above named.

PRESTON,ONT.—Attention is called to the extension of time for receiving tenders for the pipelaying, etc. in connection with the waterworks. Tenders will be received up till 6 p.m. September 22nd. C. R. Hanning, Town Clerk.

STRATFORD, ONT.—J. J. O,Brien of Guelph, purposes erecting a three story brick building on a site purchased on Downie street.—The Board of Works will ask the city council to spend $15,000 on a storm drainage system for Avon ward.

NELSON, B. C. — F. C. Gamble, Lands and Works Department, Victoria, B.C., will receiue tenders up to October 15th for erection of court house here. Plans at office of Public Works Engineer, Victoria, and with Government Agent, this place.

EDMONTON, ALTA.—E.Cheviagny intends building a residence on Tenth street, cost $2,000.—D. Ross has had plans prepared for residence on Second street, cost $5,000.—John Somerville & Sons are preparing for the erection of a new business block on First street.

TORONTO JUNCTION, ONT. — The congregation of Annette street Methodist church are considering the enlargement of that edifice.— Elllis & Connery, architects, Toronto, are preparing plans for a residence here, also for a laundry building and stores with dwelling.

CALGARY, ALTA.— The Imperial Bank have decided to tear down their present building, corner Centre and Main streets, and build a much larger building on the site.—Thomas Ryan & Co., boot and shoe manufacturers, have purchased a site on Seventh avenue west for warehouse and showroom.

SASKATOON, SASK.—Adam Turner will receive tenders up to October 1st for the purchase of $125,000 five per cent. debentures.—H. S. Griffiths is preparing plans for a new store building 100 x 65 feet to be erected on Twentieth street.

BRANDON, MAN.—The C. P. R. have granted the G. N. R. union depot facilities and it is expected that a union station will be erected.—The C. N. R. have purchased property on Ninth street as a site for a new station.—The City gives notice of its intention to construct granolithic sidewalks on Sixteenth street, Van Horn, and Rosser avenue.

PORTAGE LAPRAIRIE, MAN.—Plans are being prepared for addition to

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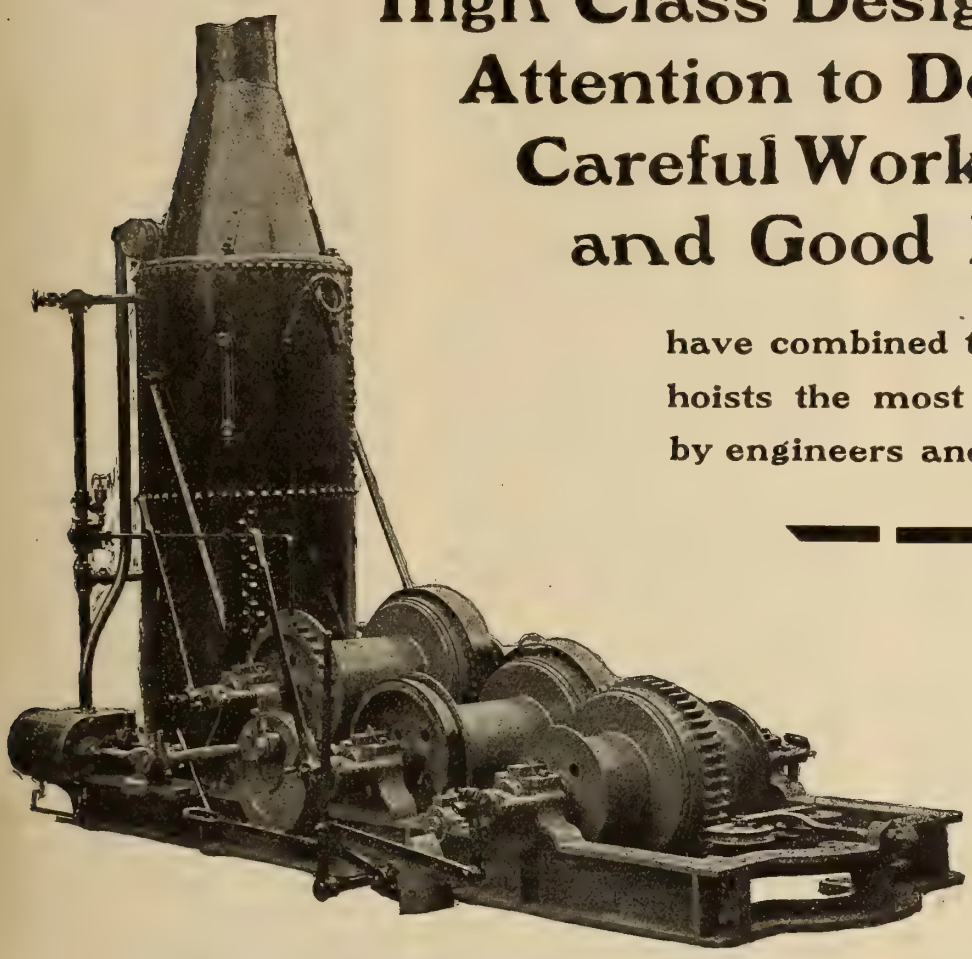
Attention to Detail
Careful Workmanship
and Good Material

have combined to make our hoists the most sought after by engineers and contractors



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W.H.C. MUSSEN & CO.

Railway, Mining and Contractors' Supplies

MONTREAL

the land titles office.—The Parks Board will receive tenders up to September 27 th for trenching, pipe laying, etc., for 3,-800 of 18 inch tile pipe.—It is expected that Elliott, Crosier & Robinson, Minneopolis, will establish a large factory here.

CHARLOTTETOWN, P. E. I.—D. Pottinger, Moncton, N.B., will receive tenders up to September 22nd for construction of an erecting, machine and blacksmith shop at this place for the Prince Edward Island Railway. Plans at Resident Engineer's office, at Department of Railways and Canals, Ottawa, Ont., and at office of Chief Engineer, Moncton, N.B.

CARMAN, MAN. — On September 29th a by-law will be voted on to raise $1,500 for erection of school building in school district of Stephenfield.—Darling & Pearson, architects, Winnipeg, will receive tenders up to September 26th for erection of building for the Canadian Bank of Commerce.—H. Armstrong will receive tenders up to September 22nd for painting the Methodist church here. Plans at office Dr. McLachlan.

CARDSTON, ALTA.—John Stocks, Deputy Minister of Public Works, Edmonton, will receive tenders up to September 20th for supply of materials and erection of Court House building here. Plans at Department of Public Works, Edmonton; with Inspector of Public Works, Calgary; and with John W. Woolf, M.P.P., Cardston; W. C. Simmons, M. P. P., Lethbridge and M. McKenzie, M. P. P., Macleod.

WOODSTOCK, ONT. — A by-law has been carried to loan $25,000 to the Canadian Bearings Co., of Hamilton, to locate their factories here.—The Bain Wagon Company are having plans prepared for an extension to their factory, 120 by 60 feet.—The ratepayers of West Zora township have carried a by-law to loan $15,000 to the St. Mary's & Western Ontario Railway for the proposed line from St. Mary's to Embro.

VICTORIA, B.C.—Tenders will soon be called for the new block, corner Fort and Wharf streets, for Pither & Leiser, for which plans are being prepared by Hooper & Watkins, architects. It will be a five story and basement building, 114 by 80 feet, constructed of pressed brick and stone.—The Dominion Government purpose erecting a detention hospital for immigrants from the far east.

PETERBORO, ONT.—E. M. Elliott, County Clerk, has taken tenders for plumbing, heating and wiring of new County House of Refuge.—Tenders are to be called for electric wiring of new fire hall.—The revised plans of Architect Blackwell for new Isolation Hospital have been approved by Board of Health, cost $5,500.—The formation of a company to erect a new hotel is being considered.—The Building Committee of the Board of Education are having plans prepared for the Collegiate Institute building.

HAMILTON, ONT.—A committee has been appointed to procure plans, etc., for a proposed Y. M. C. A. building for the east end. P. C. McGregor is interested.—The new Central church building to replace the one recently burnt is designed after an old English Cathedral, cost $150,000.—Building permits have been issued as follows: Bollinger-Andrews Construction Co., seven story, brick, barrel warehouse on King William street, cost $26,000; W.A. Stevens, seven dwellings, corner Main and Regent street, cost $9,450, two dwellings, Melburne street, cost $2,700 and one dwelling on Barton street, cost $1,350.

VANCOUVER, B.C.—The Bank of Montreal purpose enlarging their building here on Granville street,—A Theatrical Syndicate are negotiating for the Loo Gee Wing property corner Hastings and Abbott streets, for a theatre building.—Building permits have been issued as follows: P. Burns & Co., abattoir, east end, cost 200,000; W. H. Mason, business block, corner of Tenth and Westminster avenue, cost $10,000; Reilly Bros., frame dwelling, Barnard street, $1,700; P. Tardif, two frame dwellings, Comox street, $5,000, M. W. Flewelling, frame dwelling, 264 A, $1,400; W. Robertson, residence, Pendrill street, $3,000; E. J. Deacon, building, Hardwood and Nicola streets, $10,000; W. H. Dickson, dwelling, Harris street, $2,000; E. Fletty, dwelling, Gore avenue, $3,000.

MONTREAL, QUE.—The Quebec, Montreal & Southern Railway Co. have taken tenders for construction of a railway road bed from St. Francois river at Pierreville, Que., eastward to the Intercolonial Railway at Nicolet. a distance of 14½ miles.—The C.P.R. have surveying parties at work on sections of the new proposed line from this city to Toronto.—L. O. David, City Clerk, will receive tenders up to September 21st for brick, terra cotta and concrete work for the new No. 5 fire station, Berthelet street. Plans with A. F. Dunlap, architect, 72 Temple Building, St. James street.—The Road Department give notice of their intention to construct sewers in Fullum, Sherbrooke, Langlois, St. Remi, St. Mary, Dagenais, Selkirk and Ropery streets.

WINNIPEG, MAN.—The Canadian Northern Railway are inviting tenders for the erection of engine shops here.—New plans are being called for, for the proposed sub-station for the receiving of electrical energy from the Winnipeg General Power Co.—John Schwab, architect, will receive tenders up to 19th inst. for erection of a brick building on Austin street for H. Finsilver.—The Committee on Works will receive tenders up to November 20th for erection of steel superstructure for highway bridge over the Red river at Redwood avenue. Tenders will be received up to October 16th for erection of concrete piers and abutments for support of the bridge. Plans at office of Col. H. N. Ruttan, City Engineer.—James McCready Co., Montreal, have purchased a site on McDermot avenue and intend to erect a large wholesale shoe warehouse.—The following sewers have been recommended: On Notre Dame avenue from Downing street to the first bend west, cost $8,250 and on St. John's avenue from McGregor street to Mackenzie, cost $1,450.—The Health Committee will receive tenders up to September 27th for erection of septic tank and drains in connection with the Quarantine hospital. Plans with C. H. Wheeler, architect.—S. Mulvey, Secretary P. S. Board will receive tenders up to October 4th for supply of adjustable school desks.—The C.P.R. propose constructing a number of branch lines: From Moose Jaw 50 miles northwesterly; from Weyburn a distance of about 36 miles; an extension to the Stonewall branch from Teulon northerly about 20 miles; an extension of West Selkirk branch from Winnipeg beach to Gimli, 10 miles; from Lauder to Broomhill, 20 miles and a branch from near Darlingford southerly, about six miles.

TORONTO, ONT.—Ellis & Connery, architects, are preparing plans for a residence on Palmerston Boulevard for which tenders will soon be called.—Same architects are preparing plans for a house and also a laundry building with stores and dwelling at Toronto Junction.—Tenders are wanted for the erection of a pair of semi-detached houses. Plans at 157 University avenue. F. H. Herbert, architect, 9 Toronto street, will receive tenders up to September 21st for the erection of a large residence on Springhurst avenue.—D. Egerton Ryerson, Secretary-Treasurer Toronto Public Library Board, will receive tenders up to October 10th for erection of the new Public Reference Library building. Plans with Wickson & Gregg, architects, and A. H. Chapman, assistant architect, 59 Yonge street.—Plans for the new High school building, corner Gerrard and Leslie streets, have been approved and tenders for work will soon be called.—Tenders are invited up to September 20th for the erection of a concrete building near the Don for the Carriage Mountings Company. Plans with John S. Fielding, 15 Toronto street. Tenders will be received at the same time for air compressor, pneumatic tools and appliances.—Tenders are invited for plastering and brickwork for a pair of houses 497 and 499 Eastern avenue.—Tenders are invited for building a four roomed cottage 7 Wellington avenue.—Plans have been prepared for the new island bathhouse to replace Turner's baths on the western sandbar, estimated cost $8,500.—The Royal Bank will soon begin work for the construction of their new building on King street east, near Yonge.—The Norway Public School Trustees are considering the erection of a two-roomed school on Reid avenue.—The W.C.T.U. are planning for the erection of a new building for their headquarters.—The plans for the laying of 17,000 feet of conduit pipe for the waterworks, Dalhousie, N.B., may be seen at the office of Willis Chipman, C.E., 103 Bay street. Tenders for the work will be received up to October 3rd.—A. A. Barthelmes, formerly of A. A. Barthelmes & Co., has purchased a site on Carlaw avenue on which he will erect a factory for the manufacture of automatic self playing pianos.—City Engineer Rust has recommended a site on Manning avenue for the new asphalt plant.—The Canadian Shipbuilding Co., desire to obtain a lease of the water lot near Queen's wharf as they wish to enlarge their plant.—Building permits have been issued as follows: Mrs. M. Tilley, 2-story brick and stone dwelling, 57 St. Anne road, cost $2,400; Mrs. E. E. Jermyn, 2-story brick and stone dwelling, 292 Avenue road, cost $2,500; Wm. Legg, 2-story brick veneer dwelling, 41 Hamburg avenue, cost $1,700; Geo. C. Watson, 3 pair 2-story brick dwellings, Sorauren avenue, cost $13,500; George Weston, 2-story and attic brick dwelling, Palmerston boulevard, cost $12,000; Simon J. Breen, 2-story brick and stone dwelling, Howard Park avenue, cost $3,000; Mrs. L. Marshall, 3-story brick and concrete store, Queen street east, near Lee ave., cost $4,000; Geo. McGuire, 2½-story brick dwelling, corner McMaster avenue and Avenue road, cost $4,500; J. J. Walsh, 2-story brick and stone dwelling, on Fort Rouelle avenue, cost $3,500; Mrs. Crawford, 2-story and attic brick dwelling, corner Parliament and Aberdeen streets, cost $2,950; E. C. Tuckett, pair 2-story brick and stone stores and dwellings, Dundas street, near Chelsea, cost $4,500; N. Abenier, 2-story and attic brick dwelling, Roxborough avenue, near Avenue road, cost $5,000; Andrew B. Ingram, 2-story and attic brick and stone dwelling, Palmerston boulevard, cost $6,000; A. Pike, pair 2-story brick dwellings, Grace street, cost $5,000; Duttan & Wright, 2-story frame dwelling, Emerson avenue, cost $2,000, John Drury, 2-story brick store, 1014 Bloor street, cost $2,500; W. Dixon, 2-story brick dwelling, Shaw street, near Bloor, cost $3,000; A. P. Mather, 2-story brick dwelling, Radford street, cost $2,600; Wm. Murray, 2-story brick dwelling, Kendall avenue, cost $3,500; A. Wilkins Co., 4 pair 2-story brick dwellings, Avenue road, near Roxborough avenue, cost $20,000; V. A. Atkinson,

pair 2-story and attic brick dwellings, Beatrice street, cost $4,500; T. Eaton Co., Limited, 2-story brick automobile garage, Albert street, cost $25,000; S. Burrows, 2½-story brick dwelling, Deleware avenue, cost $4,300; R. Vaughan, 3 pair 2-story and attic brick dwe lings, Macpherson avenue, cost $15,000; G. L. Francis, 2-story and attic brick addition to dwelling, 38 Crescent road, cost $1,800; W. T. Giles, 2-story and attic brick dwelling, 77 Chestnut Park road, cost $8,000; W. C. Mathews, 2-story and attic brick dwelling, 8 Chestnut Park road, cost $10,000; Geo. Belbin, 2-story brick and stone dwelling, 139 Clinton street, cost $3,000; H. Galbraith, 2 pair 2½-story brick dwellings, Grace street, cost $9,000; R. N. Irvine, 2-story brick dwelling, Castle Frank avenue, cost $2,800; J. McGouegal, 2½-story brick dwelling, Langley avenue, cost $2,500; W. J. Ingram, pair 2-story and attic brick dwellings, 188 and 190 Deleware avenue, cost $6,600; Methodist Tabernacle, 1-story brick church, 648 Markham street, cost $8,000; S. Loree, 2-story and attic brick dwelling, Schiller avenue, cost $8,000; G. H. Thornley three 2-story brick dwellings, Gladstone avenue, cost $6,500; Mrs. W. H. Preston, 2-story brick and roughcast store and dwelling, corner Greenwood and Danforth avenue, cost $2,500; S. A. Leveck, 2-story brick store and dwelling, Hallam street, cost $2,500; John Rennie, 2½-story brick dwelling, corner Elm avenue, and Sherbourne street, cost $7,900; Union Bank, alterations to brick bank, 19 Wellington street, cost $8,000; S. Smith, 2-story brick dwelling, Lindsay avenue, cost $2,500; 2-story brick dwelling, Woolfrey avenue, cost $2,500; Thos. McIllwain, 2-story brick and stone dwelling, Triller avenue, cost $3,500; Pape Avenue Baptist church, brick and wood church, Pape avenue, cost $6,000; S. A. Weismiller, 2 pair 2½-story brick dwellings, near Marion street, on 93-99 Lansdowne avenue, cost $10,000; Planet Bicycle Co., 4-story brick bicycle factory, 69-71 Queen street, cost $6,500; Fred S. Duff, pair 2½-story brick and stone dwellings, 107-109 Beatrice street, cost $5,500.

FIRES.

Methodist church, planing mill and several dwellings at Shawville, Que., loss $100,000.—Sinclair McKiel's bakery, St. John, N.B., loss $5,000.—Residence of Andrew Kerr, Miramichi road, Bathurst, N.B., loss $2,500. — Residence of M. Malins, Second street, New Westminster, B.C., loss $2,000.—Planing mill and part of plant of Mine Centre Lumber Company, Mine Centre Ont., completely destpoyed.—Adelphi Hotel, A. Campbell's store, Morrison & Johnson's warehouse, Blindmen Electric Light Company's office and several other buildings at Lacombe. Alta., loss about $100,000.—Methodist church, public hall, store and dwelling of Dr. Curtis aud several other buildings at Murray, Ont., completely destroyed.—Hardware store of N. Wilmer and buildings of W. Lein at Trail, B. C., loss $11,000. — Jacob Koehler's barns with contents, completely destroyed. The loss is heavy.—Planing mill of Wm. Geary, London, Ont., loss $23,000.— Massey-Harris warehouse and other buildings at Pilot Mound, Man., loss $15,000. — Grand View Hotel, Cordova street, Vancouver, B. C., damage $2,000.—Novelty Works, Wiarton Ont., completely destroyed.

CONTRACTS AWARDED.

CARNDUFF, SASK.—Erection of Baptist church: Steadham Bros., contractors.

ORILLIA, ONT. — $10,120 drainage debentures: Wm. C. Brent, Toronto, purchaser, $10,481.

CHARING CROSS, ONT.—Heating system in Methodist church: Kelsey Manufacturing Co., contractors.

VICTORIA, B. C. — Construction of wharf and warehouse for the C.P.R.: Walter Hepburn, contractor, Vancouver.

PORT ARTHUR, ONT.—Construction of temporary pile breakwater: Canadian Northern Coal & Ore Dock Co., cost $13,000.

WINCHESTER SPRINGS, ONT.—Construction of concrete bridge: Steel Concrete Co., of Montreal, contractors, cost $3,000.

GLACE BAY, N. S.—Construction of buildings for the Marconi Co.: Rhodes, Curry & Co, Amherst, N.S., contractors, cost about $30,000.

ST. BONIFACE, MAN.—Construction of asphalt block pavement on Provencher avenue: Langley & Cook, Walkerville, Ont., successful tenders at $3.57 per square yard.

LEVIS, QUE.—Alterations for central fire station building: Masonry, Joseph Couture, $1,694; carpentry, George Roy, $3,300; plumbing, Gingras & Nadeau, $220; electric work, Edgar Lemieux, $85.

PORTAGE LA PRAIRIE, MAN.—Factory building for London Fence, Limited: Brickwork, Carr & Woodman; carpenter work, A. McLarty; painting, Semple & Cameron; plumbing, Johnston & McClymone.

TORONTO JUNCTION, ONT.—Buildings for Dominion Carriage Co.: Masonry Elgie & Page; carpentry, Thomas Sproul. —Buildings for Francis-Frost Co.: Masonry, Teagle & son; carpentry, Frank Armstrong. Ellis & Connery, Toronto, are architects for both structures.

OTTAWA, ONT.—The lowest tenders for the eight steel bridges on the eastern section of the Transcontinental Railway between Levis and La Tuque were received from the Dominion Bridge Company and the Locomotive & Machine Company of Montreal. The former tendered for bridges at Batiscan, Jacques Cartier, Riviere Charest and the C. P. R. crossing in Portneuf county for about $100,000. The latter company tendered for about $60,000 to construct brides at Riviere Noir, Riviere aux Pommes, Ste. Annes and Portneuf.—Plumbing and steam fitting for new opera house on Queen street: F.R.J. Macpherson, Peterboro, contractor.

TORONTO, ONT. — The following tenders have been accepted by the Property Committee of the Board of Education: Enlargement of Kew Beach school—Mason work, John McLeod, $5,850; carpentering, F. Westlake & Son, $5,400; plastering, E. Warren, $840: painting, J. Phinnemore, $575; roofing and tinsmithing, A. B. Ormsby Co., $997; structural steel work, Read & Brown, $410; heating and ventilating, W. F. Rutley Co., $845.—Enlargement of Dewson Street school—Masonry, John McLeod, $5,545; carpentering, Joseph Hoops, $7,856; plastering, E. Warren $1,160 painting, T. Barrett, $825; plumbing, Lewis Legrow, $526; rooting, R. Rennie & Son, $352; tinsmithing, W. Dillion & Co., $325; structural iron work, F. H. Shipway Co. $996; heating and ventilating, Fred Armstrong Co. $3,200; thermostats, N. E. Nash, $890.—Erection of new school on Phoebe Street (27 rooms)—Carpentering and masonary, John McLaod, $67,545; plastering, E. Warren, $70,16; painting, Jas. Taylor, $2,725; plumbing, Fred Armstrong Co., $2,595; roofing and tinsmithing, A. B. Ormsby Co., $1,783: heating and ventilating, Fred Armstrong Co. $14,696; thermostats, Johnston Heat Regulating Co. $1,545.—Improvement of Essex street school—Steel construction, Reid & Brown, $260; heating and ventilation, W. F. Rutley Co., $995.—Improvements of Withrow Avenue school—Structural steel, McGregor & McIntyre, $233; heating and ventilating, $995.—Palmerston Avenue school—Plumbing, Lewis Legrow, $226.

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A NOVEL INDIAN DREDGER.

Under the direction of Sir A. M. Rendel, K. C. I. E., consulting engineer for the Indian Government, there has recently been built and shipped by Messrs William Simons and Co., of Renfrew, a dredger of a special kind, designed by Mr. O. C. Lees, of the Bengal Public Works department. It is a suction-pump triple-screw steam dredger, to be used for opening up new waterways and improving the depths of shallow canals or waterways, and for depositing the dredged material upon or beyond the banks of the waterways at great distances. The vessel is 250ft. in length by 45ft. beam by 18ft. depth. The hull takes an unusual form forward, having three separate bows abreast of each other, thus forming two open wells, and each bow contains a suction frame through which the material is drawn on board for discharge on shore. Each suction frame has two suction orifices or nozzles, in front of which are two patent rotary cut ers for cutting and disintegrating clayey material which otherwise would be unsuitable for suction-pump dredging. Each suction frame is also provided with a system of water jets delivered under great pressure, designed to agitate compact sand which might not be resistant enough to warrant the employment of the rotary cutters. The cutters are driven by bevel and spur gearing from an independent four-cylinder tandem compound engine, and are of cast steel, of special form made under Robinson's patent. Each suction frame is controlled by independent hoist gear driven by a two-cylinder engine. The two centrifugal sand suction pumps, each driven by an independent set of vertical triple-expansion engines of 900 I. H. P., are specially constructed with wide space to permit of the passage of large pieces of debris, and have a nominal dredging capacity of 4,000 tons of sand per hour from a depth of 20ft. The cutters and suction nozzles operate upon a width of 20ft. The pumps deliver the material dredge direct through a floating pipe line 42 in. in diameter, which may be 600 ft. in length. On a terminal or shore-end pontoon are appliances which raise the pipe-line to a height of 20 ft. about water level, and the material is finally discharged over the canal bank to a distance of 100 ft. from the centre of the pontoon. The special feature of the pontoon is an outboard balance-weight, carried on heavy davits, and so arranged as to maintain the truss of the pontoon, irrespective of whether the embanking pipe is full or empty. Another feature of the dredger, which is to be named "Foyers," is that she is fitted with three four-bladed propellers of large surface, each driven from a separate set of vertical compound surface-condensing engines of sufficient power to propel the three-bowed hull at a speed of eight knots. Steam at 200 lb. working pressure is provided by four Babcock and Wilcox water-tube boilers, fitted with reducing valves as required for auxiliary engines. There are a large number of separate engines and auxiliaries for pumping and other purposes on board. One main condenser is provided to take steam from the installation, the condenser itself being fitted with a complete outfit of steam-driven air and circulating pumps.

BUILDING DURING AUGUST.

In Toronto during the month of August 470 building permits were issued the approximate value of which is $1,271,620. This makes a total of 2,409 permits issued from the beginning of the year and the same are valued at $8,660,525. For the first eight months of 1905, 1,873 permits were issued the value of which was estimated at $7,068,-779.

In Winnipeg the value of buildings contracted for totalled $1,125,-000 for the month of August and $9,250,000 for the first eight months of the year. A slight decrease is noted when compared with the figures of 1905, which were $1,289,-650 for the month of August and $9,300,000 from January 1st to August 31st.

In Regina 60 building permits were issued during August the value of which is placed at $326,000, making a total of $1,363,003 up to August 31st.

Building permits in Edmonton for the month of August were valued at $212,165 making a total of $1,225,590 for the eight months of the year.

PERSONAL.

Mr. Charles Brandeis, Consulting Engineer of Montreal, has been retained by the Town of St. Laurent, Que., for the improvement of their water works system.

Mr. R. R. Keelay, city engineer, Edmonton, Alta., has received notification that he has been elected a member of the National Geographical Society of the United States.

Mr. Harry Charlesworth, formrely of Woodstock, Ont., now an employee of the contracting firm of Miller & Harvey, Toronto, has been appointed secretary pro tem of the building committee of the new Toronto General Hospital.

Mr. John S. Fielding, C. E., was in Hespeler on Wednesday, the 12th inst., and made a final inspection of the new concrete dam there for the R. Forbes Woolen Mills Company, preparatory to turning the water in on the new structure. The last piece of coffer-dam was removed and the reservoir allowed to fill up. The result was eminently satisfactory to the proprietors, who are pleased to know that they will now be able to save a great deal of water that formerly was lost by leakage through the old wooden and stone dam. The new dam is absolutely tight, has a large margin of strength and has been built at a very moderate cost. The height varies from 11 to 16 feet, and the total length is 220 feet.

J. J. Fisher, contractor, Brantford, Ont., has made an assignment.

Dohoney & Donovan, contractors, Reed's Station, Que., have registered their business.

Louis Kemp, plumber, Vancouver, B. C., will be succeeded in business by Moscrop Bros.

Henri Bertrand and Joseph V. Bertrand, carpenters, Montreal, have registered under the name of Bertrand Freres.

Eugene F. Paris and Mastai Gagne, painters, Montreal, have registered under the firm name of Paris & Gagne.

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American Machine Telephone Company, Limited, Brantford, Ont., incorporated, capital $450,000. Directors, H. N. Baker, A. E. Knox and T. E. Moulden, all of Toronto.

Chemical Laboratories Limited, Toronto, Ont., incorporated, capital $50,000. Directors, R. H. Parmenter, A. J. Thomson, and R. C. Steele.

Hensall Foundry & Manufacturing Company, Limited, Hensall, Ont., incorporated, capital $40,000, to manufacture and sell plumbing and heating supplies, etc. Directors, F. C. Hunt and O. L. Robb, of London, and A. Brandt, of Hensall.

Hurley Machine Company, Limited, Toronto, Ont., incorporated, capital, $40,000. Directors, Walter Gow, J. S. Lovell, E. W. McNeill, W. F. Ralph and Robert Gowans.

Canadian Coal & Navigation Company, Limited, Tillsonburg, Ont., incorporated, capital $500,000. Directors, E. C. Jackson, G. W. Tillson, V. A. Sinclair, E. V. Tillson, S. H. Belts and C. H. Denton.

Seaboard-Prairie Land Company, Limited, Lewisville, N.B., incorporated, capital $149,000. Promoters F. C. Tait, Shediac, N. B., H. H. Smith, and H. McDougall, Halifax, N. S., W. H. Edgett, Moncton, N.B., and others.

Iroquois Motor Car Company, Limited, Welland, Ont., incorporated, capital $96,000. Promoters, J. F. Mills, Buffalo, N.Y., D. Scott, Ottawa, Ont., A. Griffiths, G. W. Sutherland, Welland, Ont., and others.

Globe Construction Company, Limited, Winnipeg, Man., incorporated, capital $5,000. Promoters, J. W. Henderson, F. R. Mayotte, T. Newell, L. G. Anderson and T. N. Neilson.

E. K. Watson & Company, Limited, Montreal, Que., incorporated, capital $20,000, to carry on the manufacture of machinery, hardware, etc. Promoters, J. H. Parkes, Sutton, Eng., E. K. Watson and G. A. Savage, Westmount, Que.

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CIVIL ENGINEERS' EXCURSION.

The members of the Canadian Society of Civil Engineers, who are at present on a tour of western Canada, arrived in Winnipeg on Tuesday, 10th inst., on the private train supplied to them by the Canadian Pacific railway. At the depot the party were met by Col. Ruttan, and members of his staff from his office, by Mayor Sharpe, Aldermen Latimer, Sandison and Pulford, representing the city council, representatives of the engineering department of the C. P. R., and a number of other Winnipeg people who have friends on the train.

A list of the arriving travellers as furnished by Professor McLeod is as follows: A. Amos, C. W. Archibald, and Mrs. W. D. Baillairge, N. T. Bertrand, Miss Bray, Mrs. Boyd, W. A. Bucke, R. de B. Corriveau, E. L. Cousins, Mr. and Miss Chanute, F. A. Drought, J. Duchastel, G. H. Frost, J. G. Greey, S. Groves, Colonel Jones, Mr. and Mrs. T. H. Jones, F. S, Keith, J. Kennedy, W. Kennedy. Captain B. Lindsay, Mr. and Mrs, La Violette, C. de B. Leprohon. Mr., Mrs. and Master Miller, C. H. Mitchell, G. D. MacKinnon, W. A. Murray, T. C. McConkey, Professor C. H. McLeod, Mr. and Mrs. N. M. McLeod, Mr. and Mrs. R. F. Ogilvy, Professor R. B. Owens, Mr. and Mrs. Papineau, the Misses Paverley, Professor J. B. Porter, Mr., Mrs. and Miss Ross, S. F. Rutherford, Dr. E. Seaborn, F. P. Shearwood, Mr. and Mrs. Frank Simpson, Miss Smith, Mr. and Mrs. W. J. Sproule, L. A. Surveyor, Mr. and Mrs. Sweet, E. VanWinkle, Mr. and Mrs. Walker, Mr. and Mrs. James White, the Misses Wicksteed.

On arrival the visitors registered at the Royal Aelxandra, and spent a few minutes preparing for the trip to the yards of the C. P. R., which was scheduled for half-past ten. At this hour the party returned to their train to which a yard engine was attached, and the run out to the works of the company was made. Two hours were spent in the inspection of the various buildings and their contents, the visitors expressing much surprise at the great extent of the yards and the class of machinery installed. On returning to the city the party boarded cars and were taken to Deer Lodge, where the engineers and their party were the guests of the city. After luncheon the return to the city was made, and the afternoon was spent in going around the city.

To the great regret of the engineers the president of the society was unable, owing to ill-health, to make the trip with them this year. H. D. Lumsden, of Ottawa, fills this important place in the society at the present time. Professor C. H. McLeod, of Magill university, Montreal, is in general charge of the interests of the travellers during the trip.

The most distinguished engineer in the party is Octave Chanute, of New York city, who with his daughter, Miss Chanute, is a guest of the society. Mr. Chanute is a past president of the American Society of Civil Engineers and has been for the past thirty years one of the best known engineers on the continent. He has been retired from the active work of his profession for several years, but still takes a very keen interest iu everything pertaining to it, devoting the most of his time to aerial navigation and special railway problems.

Tuesday night the party left for Calgary, Banff and Logan was reached on the 13th, Glacier on the 14th, and Vancouver on the 15th.

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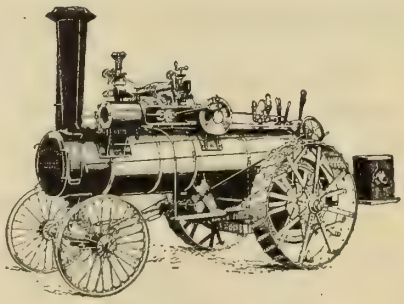

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MACADAMIZED ROADS AND DUST*

One of the requirements of a macadamized road on which horse traffic is used is that it shall be slightly elastic. Theoretically an unyielding surface may be better for vehicles; but practically a considerable amount of wear will ensue both to the road and to the vehicle unless the road surface is slightly responsive to any jar. For the horse a slightly yielding surface is imperative. This vital requirement of elasticity is really one of the chief causes of the trouble experienced with dust.

It has been pointed out that a cubic yard of metalling 2 in. to 2¼ in. cube, when screened and laid down in regular layers of 6 in. thick, contains no less than 40 per cent. of interspaces. These interspaces have to be filled with smaller material, some of it gravel or sand, but most of it fine dust or mud, according to the state of the weather and the character of the road stone. The function of this soft intervening material is to form a cushion to preserve the stone from the heavy blows of the traffic and to absorb the shock that would otherwise be unpleasantly felt by the horse or the vehicle. The character of the intervening cushion thus becomes important, for if when the road surface dries it is converted into a fine mobile dust that is easily dispersed, a stone gets kicked out, and an opening is made which, if not quickly attended to, will soon result in the disintegration of the road. The way in which some of the material used for metalling is affected by water adds to this process. It therefore becomes obvious that the best road surface will be that where the material filling the interspaces has a high specific gravity, is not easily pulverized by shocks, and is not reduced to fine dust or mud by the action of the weather.

Another common defect arising also from the same source is that a macadamized road surface rarely for long retains the even convex shape in which it was left by the steam-roller. The soft material interspersed between the stones will be greater in one part than in another; consequently, as it gives way or comes out, especially if a stone or two is loosened from the road surface, the road wears away and a hollow is formed.

It has been said, and is very generally believed, that motor-cars are the cause of dust. But motor-cars would not raise the dust if the dust were not already there, either on the surface or in the interstices of the metalling. Everyone will agree that the dust raised by cars is a great nuisance, making other road-users as well as residents by the roadside utterly miserable; but it is better to get at the cause of the trouble than blame the instrument, and the cause is undoubtedly the

*Part of a paper by Mr. A. P. I. Cotterell, M. Inst.C.E., F.S.I., read at the recent Bristol Congress of the Royal Sanitary Institute.

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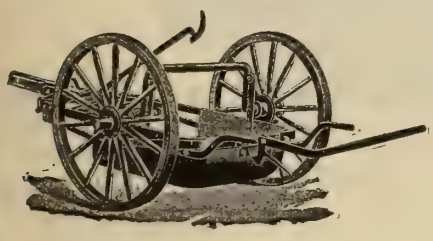

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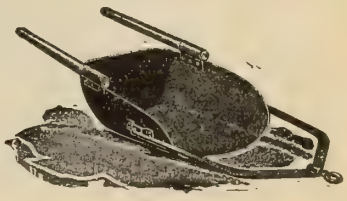

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fine material that lies upon and between the metalling.

It has been pointed out by Mr. O'Gorman that the hollows and the irregularities of the surface are largely the cause of dust raised by motor-cars. It constantly happens that while one driving-wheel is making good and effective contact with the road the other wheel is skipping lightly into a hollow in which a dust puddle may be lying. When a vehicle is moving slowly the wheel has time to traverse the full contour of the hollow, but when travelling rapidly it bounds from the ridge into the midst of the hollow, spinning round meanwhile, and so acts like a brush directly it comes in contact with the dust. The effect of this action is very easily realized.

On every macadamized road there must always be some breaking down of the surface from the pounding of the horse's hoof and the grind of the tire. The only way to deal with this is to get rid of it as quickly as possible, for it does no particular good to the road to leave it there, and it certainly does no good to the road-user or to residents by the roadside. Slow-moving traffic may not disturb it, but directly a motor-car or bicycle comes along the light debris is sent flying; whilst, if there is nothing else, the wind will see that it gets thoroughly distributed.

The more that sand and silicious material is used the less will be the dust produced. Sand, moreover, cannot so easily blow about in clouds, neither can it be churned into a fine impalpable dust, like limestone can be.

There appear to be three directions along which efforts may be made to reduce dust:—

(a) By treating the macadamized surface in such a manner as to retard the formation of dust or fix it when it is formed.

(b) By introducing another substance as a cushion between the metalling in place of the grit and dust with which the interstices are usually filled.

(c) To use as road material stone of a silicious or basaltic nature less liable to be broken down by wear or dissolved by moisture.

(a) The City Engineer of Bristol has very kindly furnished the results of experiments as to the relative cost of dressing the roads with different dust-preventing solutions. The experiments took place in Coronation-road, Bedminster.

The first preparation was spread on June 24, 1905. Subsequent applications were made on June 26 and 27 and July 4, 5 and 7, six applications in all. At the end of a week there were complaints of the dust rising, but after the fourth, fifth and sixth applications the road stood fairly well until July 17, when the whole road had to be watered, and it was found necessary to resume the ordinary street-watering on July 29. The cost of this application worked out to 6s. 9 1/2d. (or .0136 of a penny per square yard) per day, as compared with 4s. 4d. (or .0086 of a penny per square yard) per day had ordinary watering been adopted.

The second preparation was applied from July 8 to 17, altogether five applications. The dressing stood till August 17, no water being required during this interval except in channels, which were flushed out once a day from July 28. The cost worked out to 4s. 7d. (or .0091 of a penny per square yard) per day,

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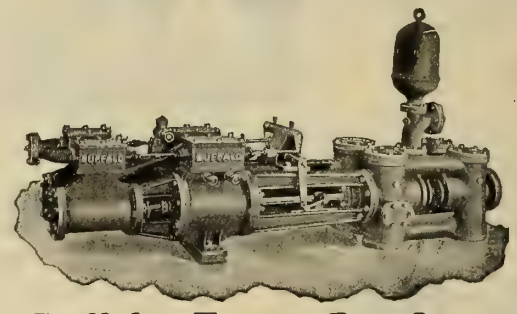

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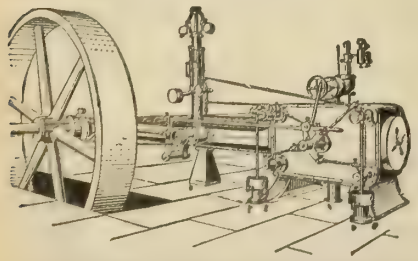

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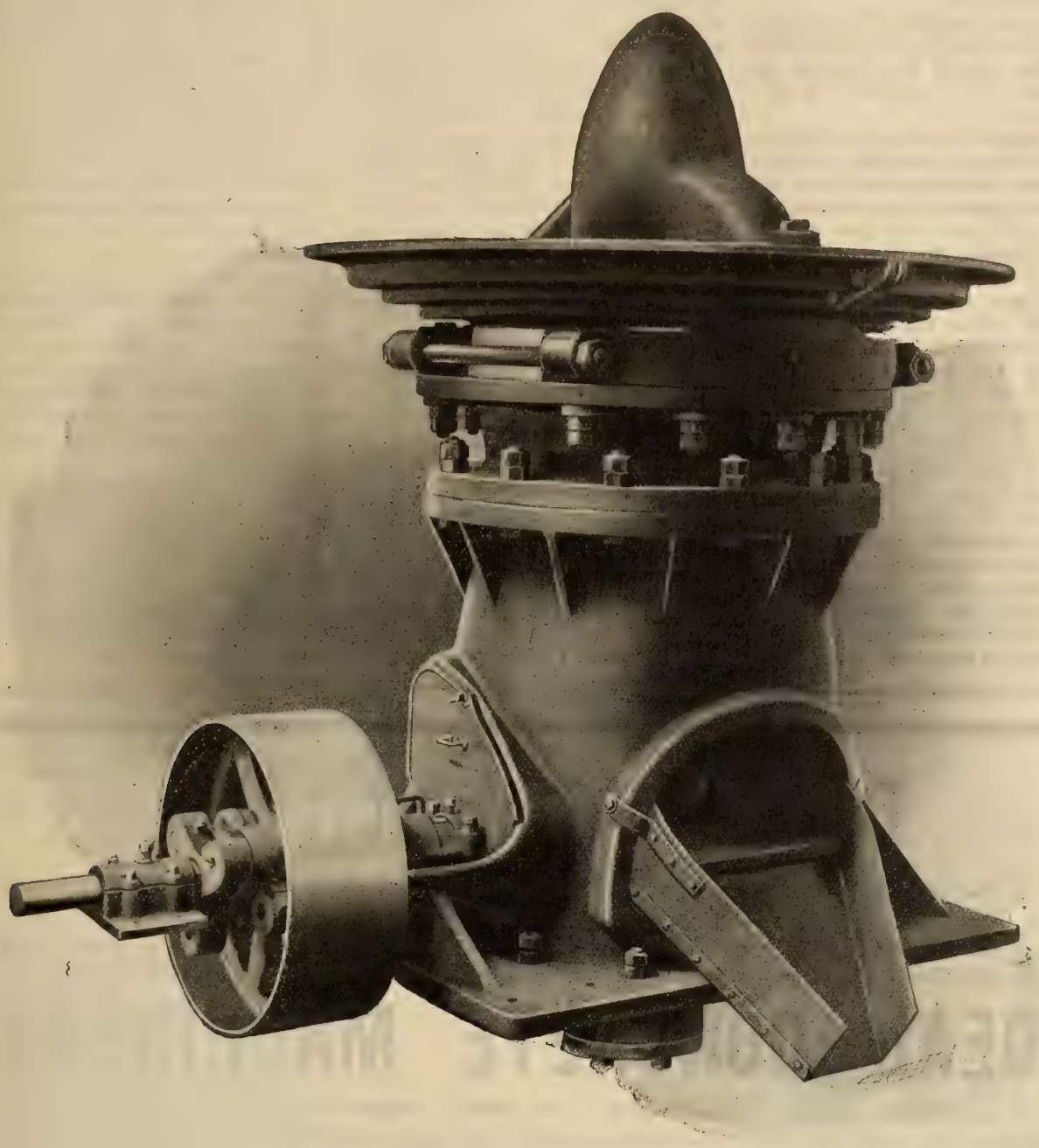

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as compared with 4s. 10d. (or .0096 of a penny per square yard) per day had the road been treated with ordinary water. Those who had formerly complained as to the street watering both spoke and wrote of the good results.

No record was kept of the reduced cost of cleansing, but it is probable that there would be a saving as compared with ordinary street-watering

In Liverpool records were kept in 1902 and 1903 of the cost of treating certain macadam roads with oil. The cost appears to have varied between ¼d. and ½d. per square yard, according to the amount of oil used, and Mr. Rathbone, from whose paper these particulars, are gathered, states that the total reduction in the cost of cleansing and watering was from 13d, to 5.5d. per square yard for a period of twenty-one days. Apparently the treatment resulted in a distinct saving in maintenance as well as reduction of wear, but, on the other hand, the oil did not form a very pleasant surface for traffic, and the smell was complained of. In 1903 the oil was applied more carefully, and renewed at intervals of three weeks, and the cost was stated to be .0022 of a penny per square yard per day, as compared with .0033 of a penny per square yard per day, the cost of ordinary street-watering.

The difference in results obtained in Bristol and Liverpool is probably due to factors which have not been noted, such as the kind and quantity of traffic. No two roads are exactly comparable.

It is probable that the trouble from dust can be very much palliated on existing roads by the use of calcium chloride and other similar solutions without appreciably increasing the cost of watering, if at all. On the other hand, the best way to make dustless roads is to use better material. A bad material can never be made permanently satisfactory by simply fixing the surface dnst.

(b) Treating the roads with a watering solution may be possible in urban, but, as a rule, it is altogether beyond the means of rural districts, and another method must be found. The dust nuisance has been successfully tackled by coating newly-rolled metalling with boiling tar and pitch. Immediately after the road is formed the tar and pitch is applied in a flat stream from a watering-pot. It is then dressed with fine flint grit, and allowed to stand a day or two for consolidation before the traffic passes over it. Even with mendip limestone, which is notorious for giving off dust, this method has been found to be successful.

Another example of the second way of overcoming the dust question is the use of tarred macadam. This has been tried for some years with more or less successful results. Tarred slag appears to have answered well in some of the busy thoroughfares of London. The tar, as in the previous case, is applied hot, the slag being also heated to dryness. Apparently better results have been obtained with slag than with limestone or basalt.

This method will probably be followed up still further, and there can be no reason why, in course of time, it may not become uniformly successful. It appears to aim in the right direction of substituting for dust an elastic and non-friable material as a cushion between the stones.

(c) Anyone who travels over the country will notice how much less dust there is where basaltic or silicious stone is used as compared with limestone, lias, or oolite. If every macadamized road could be made up with basalt the dust question would assume a very

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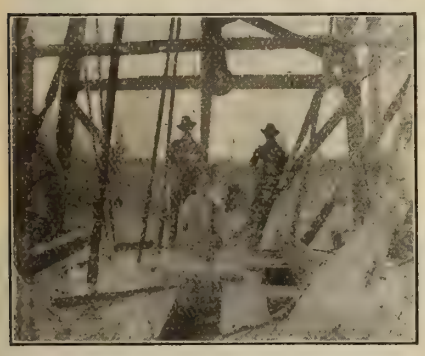

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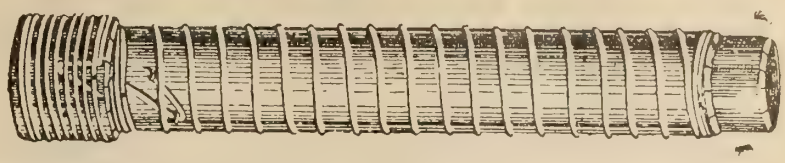

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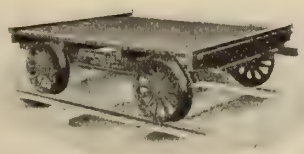

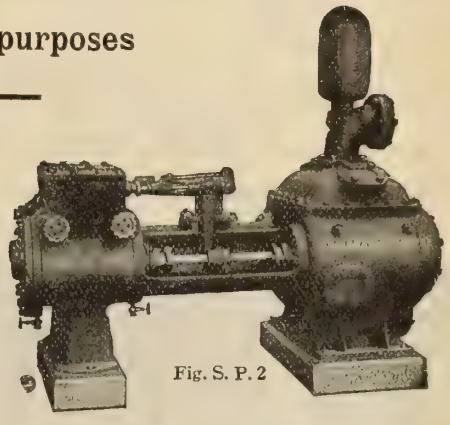

Fig. S. P. 2

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different aspect. It is not only that such roads are less easily broken down by weather, but the material, being of greater specific gravity, is not so easily moved by wind. The argument against the more general use of basalt, in districts remote from basaltic quarries, is its cost. But it does not necessarily follow that a material which is cheapest in first cost will be cheapest when the cost of maintenance is taken into account.

In Bristol we have about 234 miles of macadamized roads, of which thirty-two miles are repaired with basalt and the remainder with local mountain limestone. We have been considering the advisability of reparing an additional thirty-two miles with basalt.

The effect of the increased use of granite will be to increase the expenditure for four years, and afterwards to decrease it, so that on an average of thirteen years the actual additional outlay will be only 354l. per annum. Against this must be set the saving in cleansing and watering, which is always less with granite than with limestone, so that the probabilities are that the granite road will cost less to the ratepayers than the limestone one, although the limestone quarry that would be given up is worked by the city itself, and lies close to the river in one of the finest possible positions for supplying stone economically.

This may be an answer to the natural argument that expenditure in dust-prevention may be all very well for towns, but quite out of the question in the country, for in many parts it is possible, by means of a bold capital expenditure, to provide a better and less dusty road at practically no greater cost to the ratepayers, especially if a short-period loan can be obtained. The City Engineer has also kindly furnished results of some tests made by him into the wearing properties of different classes of stone. The first test was in Clarence-road, New Cut, where ten different kinds of stone were tried. Three basaltic areas outlasted the period of the test. The basaltic stones also gave off less debris as measured by the loads of slop removed.

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There will be some noteworthy features in connection with the power house which the Montreal Light, Heat & Power Co. are erecting near lock 4 of the Soulanges canal. The company will have, in the hydraulic development, for which Allis-Chalmers-Bullock, Limited, of Montreal, have the contract, the first plant of such capacity and class to be designed and built on this continent.

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In another respect, also, the plant will be unique, as the drafts tubes for the larger units will be moulded in concrete. It will be the first construction of this kind in the country. The wheel chambers will be built in concrete and the roadway along the canal will pass over them. It is claimed that with concrete the necessary curves in the tubes can be made so as to cause less friction than with the ordinary steel or iron penstocks and that, therefore greater power can be developed from the fall at the command of the company.

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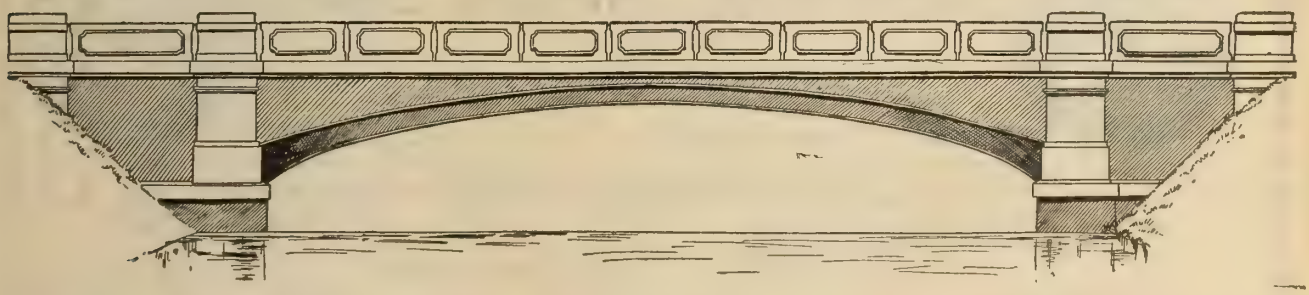

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The erection of the 500-feet South anchor arm of the 2,800-ft. double-track railroad and highway bridge across the St. Lawrence river at Quebec has been finished, and that part of the superstructure is now completed except for some of the field riveting, which will not be done until a portion of the work on the 1,800-ft. channel span has reached a finished stage and conditions of a permanent character have been developed in these trusses. The 500-ft. span has two trusses, 98 ft. deep at the shore end 315 ft. deep at the river end, in vertical planes 67 ft. apart, and weighs about 12,500,000 lbs. Both lower and upper chords are curved to form parabolic segments, and the lower chord is now supported on steel falsework about 150 ft. and 54 ft. above low water level at the shore and river ends, respectively. When the bridge is completed there will be under full live and wind load a maximum vertical pressure of about 28,000 tons on the river pier, while at the anchorage there may be a maximum upward reaction of 7,000 tons. During the erection of the bridge many of the stresses in the truss members which may eventually receive these extreme amounts were reversed and the total weight of the structure was carried directly by the piers and by the falsework between them.

The falsework, exclusive of a wooden structure, designed simply to temporarily carry the material tracks, consists essentially of two parallel lines of steel viaducts, one line concentric with each truss. It has a total weight of about 1,200 tons, and a height of from 127 to 160 ft. All field connections were made with turned bolts, and it was designed to facilitate its removal from the south side of the river and its re-erection for the other anchor arm on the north side of the river.

The falsework consists of two parallel rows of rectangular 9 x 9-ft. steel towers, 50 ft. apart, with their centers coincident with the panel points of the trusses. The towers are braced together longitudinally and transversely, so that two pairs of single towers make one large tower separated from the next by an open panel, except at the river end, where six towers are placed together making the large tower double. The falsework is equal to standard railroad viaduct work in point of careful design, strength, standard construction, quality of material, rigid inspection and workmanship. Each tower is built with four vertical posts, two of which, nearest the river, are extended from about 10 to 80 ft. higher than the others to carry on each side of the bridge a 12-ft. gauge traveler track, with its center line 18 ft. clear of the truss center. These extended posts are braced to the main towers with outside inclined posts forming a reversed batter and intersecting the tower at about the middle of the short posts.

The posts have rectangular cross-sections made with pairs of 12-in. or 15-in. channels with their flanges turned in and latticed. All posts are made in three sections spliced with mill butt joints and single outside cover plates, four in all, field-bolted to gusset plates and also bolted to

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							Neat.					3 (Sand) to 1 (Cement)				
					Initial	Final	1 dy.	7 dys.	28 dys.	3 mos.	1 yr.	1 dy.	7 dys	28 dys.	3 mos.	1 yr.
1903	20	O.K.	3.135	2.1	162	345	307	701	783	827	*	74	214	299	367	*
1904	44	O.K.	3.150	2.0	132	342	300	744	848	914	938	86	262	354	401	427

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the webs and flanges to afford connections for the diagonal 3 x 2½-in. angles that lattice the four columns together to form one primary tower. The main horizontal members connecting the primary towers in transverse and longitudinal planes to make the main towers, are riveted struts made with plates and angles; the corresponding diagonal members are 3-in. and 5-in. eye-bars. The lower ends of the posts are faced, and their feet engage double pedestals which distribute the loads over the footings.

The pedestals are of two kinds, one of which is shown in the accompanying illustration, and is virtually a pair of plate girders projecting 2½ ft. beyond the center lines of the posts and having the lower flanges united by a continuous base plate. At each end the webs are connected by a pair of shop-riveted channels with open holes in their webs to receive the bolted connections to the post webs which engage them. Connection plates are riveted to the webs outside to receive the eye-bars, forming the diagonal members of the towers. The other type of pedestals substantially consist of two ordinary pedestals receiving the posts as above described and connected together only by the flange angles which are continuous across the face of the tower and correspond with the lower flange angles in the pedestal illustrated. The web plates and base plates connected to them, are not as in the former cases continuous, but have short lengths suited for the single posts.

The top sections of the short posts, which support the trusses, have their flanges bolted between the webs of twin transverse girders, four at each primary tower. Each of these girders is 3 ft. deep, with a ⅜-in. web plate and a single 6 x 6-in. outside angle for each flange. The webs are connected and reinforced by four vertical 12-in. channels shop-riveted to both, so that the pair are handled together as a single rigid piece. The top flange angles are connected by a 25x⅜-in. cover plate about 6 ft. long, which serves as a base plate to receive a grillage of nine 20-in., 65-lb. I-beams, about 11 ft. long, on which the camber blocks are set.

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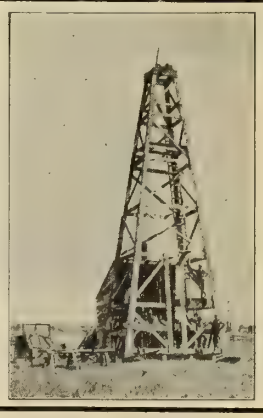

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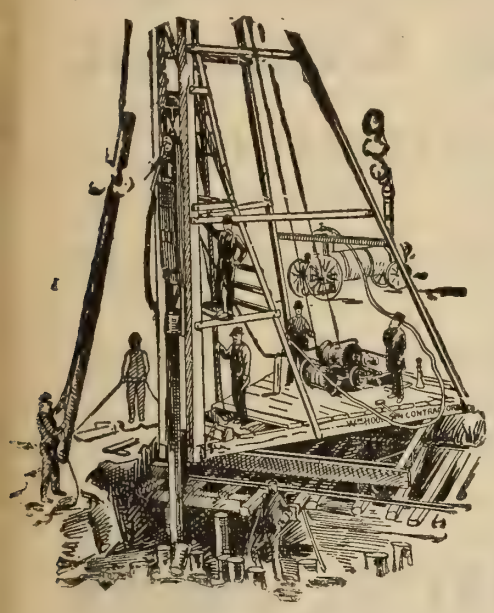

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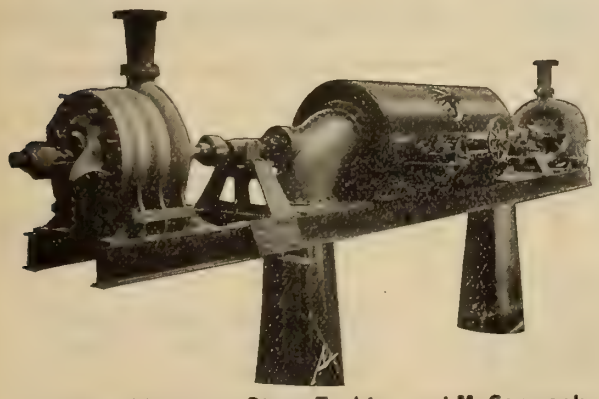

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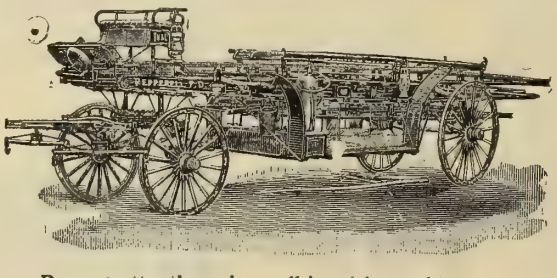
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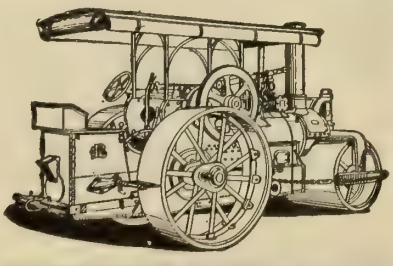
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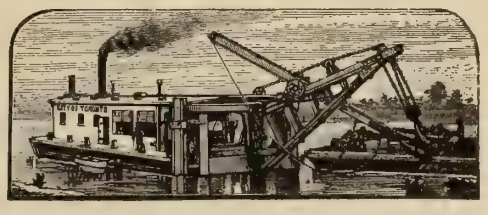

Dredges, Ditchers, Derricks Steam Shovels,

Submarine Rock Drilling Machinery, Mine Hoists, Hoisting Engines, Centrifugal Pumps for Water and Sand, Stone Derricks, Clam Shell Buckets, Steel Skips, Coal and Concrete Tubs, and other Contractors' Machinery.

The Toronto Pottery Company, Ltd.

Toronto, Ontario

Manufacturers and Jobbers of

Contractors' Supplies

Fire Brick, Paving Brick, Portland Cement, Sewer Pipe

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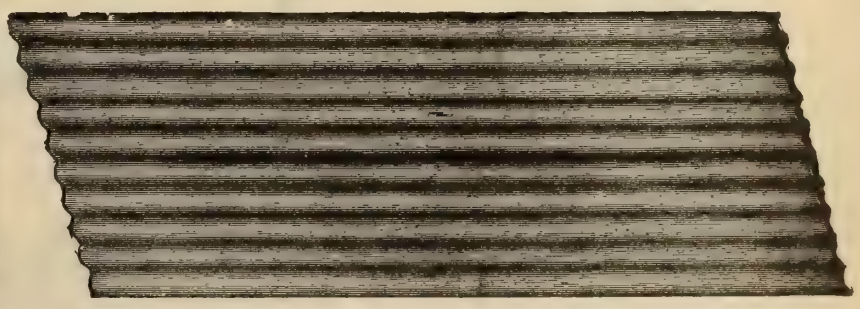
CORRUGATED IRON

600 TON STOCK. PROMPT DELIVERY.



Pedlar's Corrugated Steel Sheets are manufactured on a **38,000 lb. Ohl Press**—one corrugation at a time—and are guaranteed straight and true to size. **Six Hundred Tons in Stock in Oshawa, Montreal, Toronto, Ottawa and London,** in gauges varying from 28 to 18, both painted and galvanized. Made in 1", 2" or 2¾" corrugation—corrugation lengthwise or across the sheet. Sheets 2, 3, 4, 5, 6, 8 or 10 feet long at no extra charge. **Ask for Catalogue No. 14 R** and give specifications for prices.

We are the lagest makers of Sheet Metal under the British Flag.

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Montreal, Que. 321-3 Craig St. W. *Ottawa, Ont.* 423 Sussex St. *Toronto, Ont.* 11 Colborne St. *London, Ont.* 69 Dundas St. *Winnipeg, Man.* 76 Lombard St. *Vancouver, B.C.* 615 Pender St.

Write your nearest office. Head office and Works, OSHAWA, ONT.

"Keeping Everlastingly at it Brings Success."

eler was equipped with two standard double-drum, fourspool Lidgerwood hoisting engines, which, being used before the erection plant was completely installed, were operated by ordinary steam engines instead of the electric motor which later superseded all other motive power on the work.

Each primary tower is seated on a single continuous footing composed of wooden grillages receiving the two long pedestals for the transverse pair of posts at every tower. Shallow excavations were made in the rock and earth and were leveled up to give a surface about 18 ft. square on which was laid a tier of 12x12-in. longitudinal timbers close together. Near each end of these timbers two tiers of crossed timbers were built up to form seats for the steel pedestals and were secured to each other and to the lower tier by eight vertical bolts, one at each end of each end timber in the upper tier, thus fixing the latter as guides to hold the intermediate timbers. This construction involved the use of nearly 8,000 ft., board measure, of timber for each foundation. They were proportioned to reduce the maximum pressure to 3,000 lb. per square foot on a 6-in. sand cushion. No material settlement, displacement or distortion has been observed.

Mr. E. A. Hoare is the chief engineer, and Mr. Theodore Cooper, consulting engineer, of the Quebec Bridge Co. The contractor for the steel work and erection is the Phoenix Bridge Co.; Mr. David Reeves, president; Mr. John Sterling Deans, chief engineer; Mr. A. B. Milliken, superintendent of erection, and Mr. G. A. Tretter, assistant to superintendent of erection. —Engineering Record.

A. LEOFRED
(Graduate of McGill).
Consulting Engineer
WATERWORKS A SPECIALTY.
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Phone 545.

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WIRE ROPES for Cableways, Aerial Ropeways, Elevators, Cranes, Derricks, Pile Driving, Drilling, etc.
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Crushed Stone and Slag
Best for Concrete. Any quantity shipped promptly.
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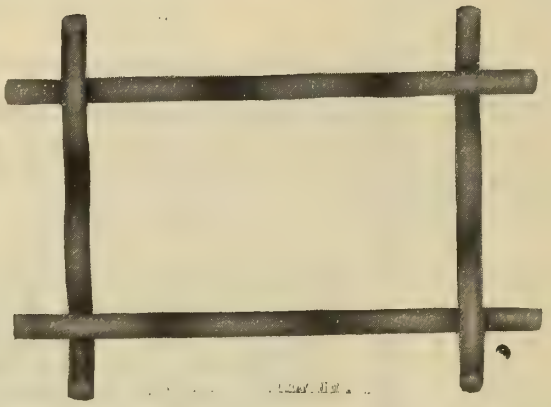
Head Office for Canada:
6 Colborne Street, Toronto
A. E. KIRKPATRICK, MANAGER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CRIMPED STEEL WIRE
THE STRONGEST, BEST AND CHEAPEST
If interested write for pamphlet and full particulars . .
THE
B. GREENING WIRE CO.
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HAMILTON, ONT.
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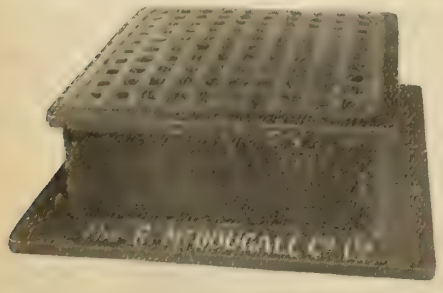
MANHOLE COVERS and FRAMES


We have several designs and this shows the article in most general use. It is Heavy and Substantial, made from good materials and will stand any strain to which it may be subjected.
Will be pleased to furnish particulars of these, together with
CATCH BASINS, HYDRANTS, CURB BOXES, ETC.

The R. McDOUGALL COMPANY, Limited,
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CAST IRON PIPE FOR WATER OR GAS

Special Castings,

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The British Columbia General Contract Company, Limited

Telegraphic Address: "Dredging" Fairfield Building, VANCOUVER, B. C.

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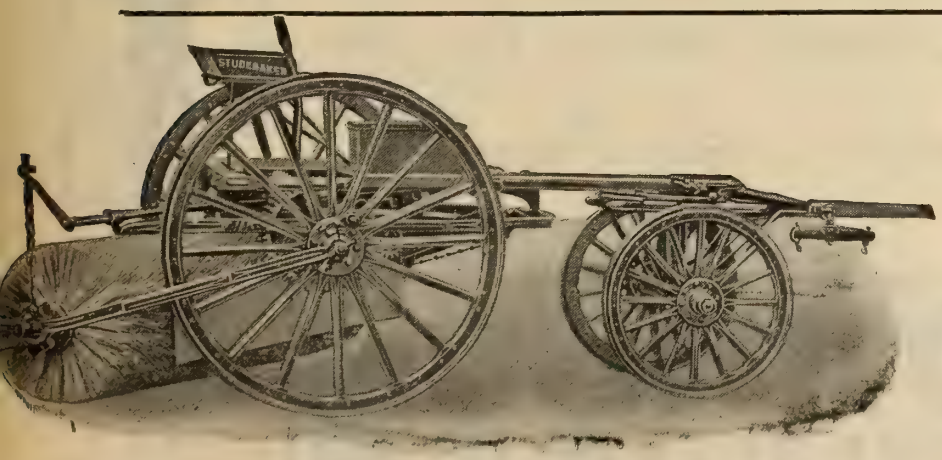
Bridges
Concrete Construction
Harbor Works
Railways
Dredging and Reclamation



Staakpole Patent Improved **Street Sweeping Machine** Is the Standard of Perfection

Because no sweeper so effectually does the work for which it is designed as "The Studebaker." It Sweeps Clean. No sweeper is constructed with the same degree of care and mechanical precision. It Wears Well. "The Studebaker" has the smallest number of working parts, and has less gearing than any other sweeper made. It is free from all unnecessary complications. With reasonable care it does not get out of order. Send for complete descriptive catalogue.

Studebaker Sprinkler

(PATENT IMPROVED.)

Does not clog or get out of order. Greatest width of spray. Can be graded from driver's seat to any volume.

We also make an . . .

IMPROVED VERTICAL SPRAY for Pavements

Geo. Heaman, Mnfr., London, Ont.

Ready for Immediate Shipment upon Receipt of Your Order.

WIRE ROPE

IN

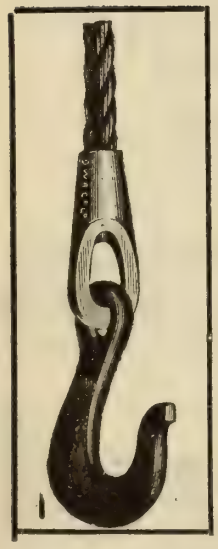
ALL LENGTHS
ALL SIZES

FOR

HOISTING, ELEVATORS, TRANSMISSION, GUYS, BRIDGES, LUMBERING, DREDGING, DERRICKS, ETC.

Wire Rope

"The Rope to Remember"



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CANADIAN

Contract Record

A Weekly Journal of Public Works, Tenders, Advance Information and Municipal Progress

This Paper Reaches Every Week the Town and City Clerks, Town and City Engineers, County Clerks and County Engineers, Purchasers of Municipal Debentures and Leading Contractors in All Lines Throughout Canada

VOL. 17. TORONTO, MONTREAL — SEPTEMBER 26, 1906 — WINNIPEG, VANCOUVER No. 30

THE CANADIAN CONTRACT RECORD
PUBLISHED EVERY WEDNESDAY

As an intermediate Edition of the Canadian Architect and Builder.

THE C. H. MORTIMER PUBLISHING COMPANY
of Toronto, Limited,

Subscription Price, $2 per annum, payable in advance.

CONFEDERATION LIFE BUILDING, TORONTO
Telephone Main 2362.

Branch Offices:
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POSITION WANTED

in Contractor's office, Advertiser has had a number of years' experience, more particularly on the commercial side of the building business. C. F. MYERS, 935 Bathurst Street, Toronto.

FOR SALE

We offer for immediate shipment from stock, and subject to prior sale: 10,000 ft. S & F Cast Iron Pipe "MacLarens'," 8" x 45 x 12' o/, Proved to 300 and coated.

L. H. GAUDRY & CO.,
Quebec

Proposals For Concrete Bridge Piers

Sealed proposals addressed to Alderman J. G Latimer, Chairman, Committee on Works, for erection of Concrete Piers and abutments for the support of a steel bridge over the Red River at the foot of Redwood avenue, Winnipeg, will be received at the office of the undersigned up to 2.30 p. m. on

TUESDAY, OCTOBER 16, 1906.

Plans, specifications and forms of proposal may be obtained at the office of H. N. Ruttan, City Engineer, Winnipeg, Canada.

Each bid must be accompanied by an accepted cheque or draft payable to the order of the City Treasurer, or cash deposit for a sum equal to 5 per cent. of the total amount of the bid, which will be subject to forfeiture in case of failure on the part of the contractor to enter into a written contract with approved sureties if called upon to do so.

The City reserves the right to reject any or all tenders or to accept any bid which appears advantageous to the City of Winnipeg.

C. J. BROWN,
City Clerk.

City Clerk's Office, Winnipeg, September 12th, 1906.

Town North Toronto

Sealed tenders will be received by the undersigned marked "Tenders for Sidewalks" up to 7 o'clock p.m. on WEDNESDAY, 3RD OCTOBER, 1906, for building a Concrete Sidewalk 5 feet in width, on the east side of Yonge street from about the north side of Eglinton avenue southerly to the south limit of the town, except a part to the south of Glenwood avenue, where the present plank walk is on trestles. Also for a Concrete Sidewalk on both sides of Erskine avenue 4 feet in width part way. Also for a Vitrified Brick Sidewalk 4 feet in width on Glengrove avenue from Yonge street westerly to the west side of lot 126, between the south row of double pines.

Plans and specifications can be examined at the Town Hall and specially from 4 to 6 o'clock p m. on Thursday, 27th September, 1906, when the town engineer will be present to give explanations as to same.

Tenders to be at a rate per lineal foot of 5 feet or 4 feet in width for the concrete walk and at a rate per lineal foot for vitrified brick walk 4 feet in width, in all cases to include lanes, private entrances, road crossings, etc., as per plans and specifications.

A marked cheque for $25 to accompany each tender, to be payable to the undersigned, which to be returned when the successful tenderer enters into contract with the town.

The lowest or any tender not necessarily accepted.

W. J DOUGLAS, Clerk and Treasurer,
Town of North Toronto.

Eglinton P O., 17th September, 1906.

TEMISKAMING and NORTHERN ONTARIO RAILWAY COMMISSION.

TENDERS FOR GRADING

Sealed tenders, addressed to the undersigned and marked respectively "Tender for Kerr Lake Branch" "Tender for Charlton Branch" and "Tender for Haileybury Spur," will be received up to 12 o'clock noon, on TUESDAY, OCTOBER 2ND, 1906, for all the work except tracklaying and ballasting connected with the building of the following branch lines, viz.:

1. From the main line near Cobalt to the Kerr Lake region, a distance of approximately four miles
2. From the main line to a point at or near Haileybury Wharf, a distance of about one and three-quarter miles.
3. From the main line near Englehart to the Village of Charlton, a distance of about eight miles

Plans and specifications may be seen at the office of the Commission, 25 Toronto Street, Toronto, and at the Chief Engineer, North Bay, Ontario.

Marked cheques payable to the order of the Chairman and Secretary-Treasurer of the Commission must accompany tenders as follows. Kerr Lake Branch $2,000.00; Haileybury Spur, $500.00; and Charlton Branch, $2,000.00.

Tenders must be made out on the printed form supplied by the Commission.

The commssion will not be bound to accept the lowest or any tender.

H. W. PEARSON,
Secretary-Treasurer,
25 Toronto St., Toronto.

Dated at Toronto, September 10th, 1906.

Papers inserting this advertisement without authority will not be paid for same.

TOWN OF DALHOUSIE

Province of New Brunswick

TENDERS FOR WATERWORKS

Sealed tenders addressed to the Town Clerk of the Town of Dalhousie, New Brunswick, will be received until 7.30 p. m.,

Wednesday, October 3rd, 1906,

for laying about 17,000 feet of conduit pipe, part 12-inch, part 10-inch, and part 8-inch diameter, and for furnishing all materials therefor.

Plans and specifications will be ready for inspection, and may be seen at the office of the Chief Engineer, 103 Bay street, Toronto, or at the office of the Town Clerk, Dalhousie, N. B., on and after September 24th.

No tender necessarily accepted.

Tenders for other sections of the work will be called for at a later date.

WM. S. MONTGOMERY, Esq.,
Mayor, Dalhousie, N. B.
ALEX. J. LE BLANC, Esq.,
Town Clerk, Dalhousie, N. B.
W. E. DOUGLAS,
Resident Engineer, Dalhousie, N. B.
WILLIS CHIPMAN,
Chief Engineer, 103 Bay St., Toronto.

THE BOARD OF EDUCATION

TENDERS WANTED

Sealed tenders addressed to the Secretary-Treasurer of the Board will be received until

MONDAY NOON, OCTOBER 1ST, 1906

for the several trades necessary in the erection of a

High School Building in Riverdale

also for the enlargement of

Rosedale Public School

and for fitting up

Building on Pembroke Street

for Manual Training Class.

Specifications may be seen and all information obtained at the offices of the Board, City Hall. Each tender must be accompanied by the deposit mentioned in the said specifications and forms of tender. The lowest or any tender will not necessarily be accepted.

W C. WILKINSON,
Secretary-Treasurer.
H. SIMPSON,
Chairman of Committee.

[FOR ADDITIONAL ADVERTISEMENTS FOR TENDERS SEE NEXT PAGE.]

TOWN OF DUNNVILLE
PROVINCE OF ONTARIO

WATER WORKS EXTENSIONS

Sealed tenders will be received by the town clerk until 8 p.m.

TUESDAY, OCTOBER 2ND, 1906

for laying about 7,000 lineal feet of water mains also for furnishing all materials therefor.

Plans, specifications, etc., may be seen at the office of the Chief Engineer, 103 Bay street, Toronto, and at the Town Clerk's office, Dunnville, on and after September 20th.

No tender necessarily accepted.

WILLIS CHIPMAN, Chief Engineer,
103 Bay Street,
Toronto, Ont.

J. W. HOLMES, Esq.,
Town Clerk,
Dunnville, Ont.

Proposals For Bridge Superstructure

Sealed proposals addressed to Alderman J. G. Latimer, Chairman, Committee on Works, for erection of steel superstructure for Highway Bridge over the Red River at Redwood avenue, Winnipeg, will be received at the office of the undersigned up to 2.30 p. m. on

TUESDAY, NOVEMBER 20, 1906.

Plans, specifications and forms of proposal may be obtained at the office of Col. H. N. Ruttan, City Engineer, Winnipeg, Canada.

Each bid must be accompanied by an accepted cheque or draft payable to the order of the City Treasurer, or cash deposit for a sum equal to 5 per cent. of the total amount of the bid, which will be subject to forfeiture in case of failure on the part of the contractor to enter into a written contract with approved sureties if called upon to do so

The City reserves the right to reject any or all tenders or to accept any bid which appears advantageous to the City of Winnipeg.

C. J. BROWN,
City Clerk.

City Clerk's Office, Winnipeg, September 12th, 1906.

SALE OF

Contractors' Plant

By Tender

Sealed Tenders, addressed to the undersigned, will be received until Tuesday, the 2ND DAY OF OCTOBER, 1906, at noon, for the purchase of the plant of Barry and McMordie, contractors, Niagara Falls, Ontario. The said plant consists of the following:—

1 Hoisting Engine (Beatty) 16 horsepower.
1 Traveling Derrick.
7 Dump Cars 3-yard capacity, standard gauge.
2 Diving Outfits.
1 Upright Beatty Boiler, 18 horsepower.
1 Upright Beatty Boiler, 21 horsepower.
1 Upright Beatty Boiler, 24 horsepower.
5 Steam Drills.
1 Rand Air Compressor, 12 x 14.
1 Rand Air Compressor, 6 x 8.
3 Wood Boring Air Augers.
2 Stiff-leg Derricks
1 Northey Pump, 3-in. suction.
2 Small Dump Cars, 30-in. gauge.
Picks, Shovels, Bars, Water Pipe, Steel, Ropes, Etc.

The said plant may be inspected at the yards of Barry and McMordie, Niagara Falls, Ontario. Each tender must be accompanied by a marked cheque for 10 per cent. of the amount of the tender. The remainder of the purchase money will be payable in cash within fifteen days after acceptance of tender, or, if desired, payment of 50 per cent. of the purchase money may be deferred for six months on approved security being given.

The highest or any tender will not necessarily be accepted.

BICKNELL AND BAIN,
2 Leader Lane, Toronto.
Vendors' Solicitors

TENDERS FOR

FIRE ALARM

Sealed tenders, addressed "F. Adams, Esq., Chairman Fire, Water and Light Committee," and endorsed "Tenders for Fire Alarm," will be received at this office up to 4 o'clock in the afternoon on THURSDAY, THE 18TH DAY OF OCTOBER, 1906, for a Fire Alarm Telegraph for the City of Peterborough.

1. For supplying all the material required, and erecting, equipping and putting it in operation.
2. For supplying all the material required and delivering it at Peterborough
3. For maintenance and repairs of the system after it is erected for periods of five or ten years.

Tenders to give full particulars and complete specifications of the system proposed and all the material.

A list of boxes, gongs, etc., required will be furnished on application to the undersigned.

The lowest or any tender not necessarily accepted.

S. R. ARMSTRONG,
City Clerk.

City Clerk's Office, Peterborough, September 21st, 1906.

CONTRACTS OPEN.

NORTH SYDNEY, N. S.—A new bait freezer will be erected here cost $7,000.

WIARTON, ONT.—A. P. Ebert is considering the rebuilding of his factory recently burned.

LETHBRIDGE, ALTA.—J. H. Hanson of Butte, Montana, purposes erecting a large sawmill here.

WEST SELKIRK, MAN.—The by-law has been carried to establish a system of waterworks here.

INNISFREE, ALTA.—H. Johnson, of Wetaskiwin, intends erecting a large store building this season.

WOLSELEY, SASK. — R. E. Hall will receive tenders up to September 27th for heating the new town hall.

PARRY SOUND, ONT.—The by-law has been carried to raise $10,000 for extension of the waterworks mains.

HAGERSVILLE, ONT.—J. H. Scott, Town Clerk, has taken tenders for the purchase of $10,000 debentures.

MEDICINE HAT, ALTA.—J. E. Howson has purchased the American hotel and purposes having it remodelled.

RAPID CITY, MAN. — Architect Elliott, Brandon, has prepared plans for a large Oddfellows' hall building, 50 by 80 feet.

YALE, B. C.—Plans have been prepared for a two story boat house, on Mill river, cost between $50,000 and $75,000.

INGERSOLL, ONT.—T. R. Mayberry has taken tenders for construction of a cement arch bridge in West Oxford township.

GRAND FORKS, B.C.—The Boundary Iron Works have purchased a site and are arranging for rebuilding their works here.

SHAWVILLE, QUE.—The Methodist Congregation are planning to rebuild their church recently burned, estimated cost $7,000.

ESTEVAN, MAN.—The Calgary Brewing Co. and the Imperial Oil Co. purpose erecting two large warehouses here this fall.

RIDGETOWN, ONT.—The installation of a general system of waterworks for the town, is being discussed by business men.

SASKATOON, SASK.—Subscriptions are being received for the proposed general hospital building to be erected at a cost of $30,000.

PONOKA, ALTA.—A by-law will be voted on October 9th to raise $7,200 to build a fire hall and provide appliances for fire protection.

MONCTON, N.B.—The City Council will seek legislation to authorize a grant of $10,000 for the erection of permanent exhibition buildings.

FREDERICTON, N. B. — C. A. Sampson, Victoria Public Hospital, has taken tenders for remodelling the heating plant of that building.

SOURIS, MAN.—It has been decided to adopt the plan of Architect Shillinglaw of Brandon for the new Methodist church building, cost $20,000.

MIMICO, ONT.—The building of the railway branch of the Y.M.C.A. is being moved to the roundhouse where a two-story addition will be built.

WOODSTOCK, ONT.—The by-law which was voted on to loan $25,000 to the Canada Bearings Co., Hamilton, to establish a factory here, did not carry.

TILLSONBURG, ONT.—A. R. Raynes, Town Clerk will receive tenders up to October 8th for the purchase of $5,000 4 1/2 per cent. waterworks debentures.

HESPELER, ONT.—W. A. Hudson, architect, Preston, is planning for the remodelling of the building occupied by S. L. Hahn, into offices for the Merchants' Bank.

ST. JOHN N. B.—Tenders are taken this week for sewer and plumbing work for mannual training and domestic science school building, Waterloo street. H. H. Mott, architect.

AMHERST, N. S.—C. W. Holmes has authorized the Secretary of the Board of Trade to offer a free site for a factory to the promoters of the new industry being organized.

NELSON, B.C.—The Canadian Bank of Commerce have purchased a site on West Baker street on which they will at once proceed to build a stone and brick office building.

NEW WESTMINSTER, B. C.—The B. C. Telephone Company are considering the erection of a fine office building in the city, also the installation of the latest type of switchboard.

MOUNT FOREST, ONT.—The Provincial Railway and Municipal Board have granted the application of the town to issue $5,000 debentures for extending their waterworks system.

PORT ELGIN, ONT.—R. Munro, Town Clerk, will receive tenders up to October 1st for purchase of $30,000 waterworks debentures and $2,500 debentures, interest 4½ per cent.

BRANDON, MAN.—The plans for the Collegiate Institute building prepared by Architect Elliott have been passed by the School Board. Building to be of St. Louis red pressed brick, cost $50,000.

CALGARY, ALTA.—A four story addition to the Alberta Hotel will be erected this season.—The Calgary Hotel Co. have recently been incorporated and propose to construct a new hotel building.

CARTIERVILLE, QUE.—Plans and specifications for the waterworks of the village are being prepared by Charles Brandeis, Consulting Engineer, Montreal. About 3½ miles of streets will be provided.

SYDNEY, N. S.—The directors of the Y. M. C. A. are considering the erection of a new building.—The Cape Breton Foundry Co. will soon begin the erection of its new buildings in south end of the city.

EBURNE, B. C.—B. W. Garrett will receive tenders up to September 28th for the construction of a dyke and ditch, flood boxes, etc. Plans at office of Thomas Watts, Engineer for the Commissioners at Steveston, B. C.

PORTAGE LA PRAIRIE, MAN.—The plans for a new steam laundry on

Furnished with either heavy steel drop bails or chains

"CYCLOPEAN" CONCRETE BUCKETS

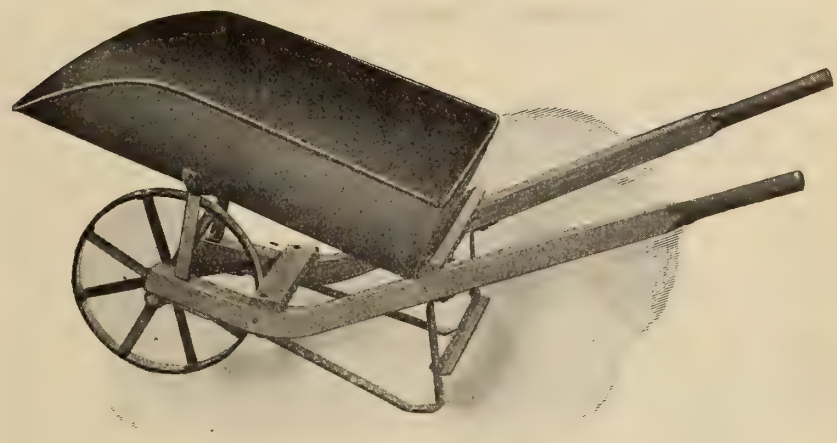
STRONGEST AND BEST
DUMP CLEAR IN A MOMENT

All Sizes and Styles for Prompt Shipment

"STERLING"

ROLLER BEARING
WHEELBARROWS

10 Styles. Send for Catalogue



W. H. C. MUSSEN & CO.

Railway, Mining and Contractors' Supplies
MONTREAL

Tupper street have been prepared and work of construction will soon begin.—The Detachable Boiler Flue Co. will erect a factory here, 100 by 75 feet.

MARYSVILLE, N. B.—C. H. LaBillois, Department of Public Works, Fredericton, will receive tenders up to October 8th for repairing McConnell bridge. Plans at the Department and at the Alex. Gibson Manufacturing Co.'s store here.

CORNWALL, ONT,—L. K. Jones, Department of Railways and Canals, Ottawa, will receive tenders up to September 28 for the work of rebuilding the retaining wall in the back ditch of the Galop's Canal. Plans at the office of the Superintendent of the St. Lawrence Canals.

VICTORIA, B.C.—Hooper & Watkins, architects, have taken tenders for the erection of a brick addition to the Williams building on Broad street for David Spencer.—C. A. Harrison, proprietor of the Driard Hotel, has purchased a site on Haywood avenue for a new residence.

QUEBEC, QUE.—The construction of the Quebec & Saguenay Electric Railroad from St. Joachim to Malbae, a distance of 58 miles, will be commenced shortly.—Mrs. Pelletier will build a residence on St. Cecile street, cost $2,500.—It is rumored that the Grand Trunk Railway management have decided to erect a new palace hotel here in the near future.

PORT ARTHUR, ONT.—F. Gelinas, Department of Public Works, Ottawa, will receive tenders up to October 12th for construction of a breakwater. Plans with E. B. Temple, resident engineer, this town; J. G. Sing, Confederation Life Building, Toronto, and at the Department, Ottawa.—The Meisel Manufacturing Co. intend erecting a factory in the north end of the town.

LONDON, ONT.—Tenders will be received by H. Needham, reeve, up to September 29th, for steel joists, painting and other repairs to iron bridges in London township, over Thames river, on Adelaide street road. Plans at County Engineer's office, County Buildings.—The Grand Jury consider that a new court house should be erected for the city and the county of Middlesex.

OTTAWA, ONT.—N. J. Kerr, City Engineer, will receive tenders up to September 26th for construction of asphalt pavement on Dalhouise street, from St Patrick to St. Andrew.—The G.T.R. propose to build a line between this city and Kingston.—The National Transcontinental Railway Commission will shortly invite tenders for the construction of 200 miles of road running east and west from Lake Abittibi.

REGINA, SASK.—The plans of John Woodman, architect, Winnipeg, for the proposed Union Station have been submitted to the Board of Trade and City Council.—The School Board are considering the erection of a new school in the north side of the city.—A site has been purchased corner Cornwall street and Victoria avenue for the new Land Titles office for which plans are being prepared by the Provincial architect.—It is stated that the Malcolm Canneries are seeking incorporation and purpose erecting large packing houses here.

MONTREAL, QUE.—Taylor, Hogle & Davis, architects, have prepared plans for additions to the Nurses' Home of the General Hospital.—The C. N. R. are considering the erection of repair shops here for the eastern lines.—The Allis-Chalmers-Bullock, Limited, intend enlarging their buildings.—Building permits have been issued to the Canadian Express Company for a ten-story office building, corner Youville square and St. Paul street, cost $250,000, also, to C. P. R. for a new paint shop, adjoining the Angus shops, cost $70,000.

EDMONTON, ALTA.—H. A. Magoon, architect, has prepared plans for a new theatre to be erected corner Jasper avenue and Third street, the building to be two-story and 48 x 110 feet.—The congregation of Queens avenue church have decided to erect a manse on the lot adjoining the church, cost about $3,000.—Tenders are being taken for steam heating of the new addition to the Bulletin building.—Building permits have been issued as follows: W. L. Lessing, residence, Fraser avenue, cost $2,000: Philip Hager, residence, Namayo avenue cost $1,300; H. Lloyd-Young, dwelling, cost $1,700.

HAMILTON, ONT.—The Provisional Committee appointed in connection with the new proposed Y.M.C.A. building in the East End recommend the erection of a building to cost $30,000.—Fraser & Randall, real estate brokers, have been commissioned to secure a site for a silk manufacturing company of New Jersey, wishing to locate here.—Building permits have been issued as follows: E. H. Bawtinheimer, brick dwelling, Madison avenue, cost $1,500; T. H. & B. Railway, car repair shop, Garth street, cost $4,000, also oil house $1,500; W. Swales, two residences, Gibson avenue, cost $2,500.

VANCOUVER, B. C.—The Sons of England are considering the erection of a new hall.—The Board of Trade, Trades and Labor Council and Hundred-Thousand Club are considering the proposal to unite to erect a building for their use.—Dalton & Eveleigh, architects, are preparing plans for rebuilding the Grand View Hotel, Cordova street.—Ald. G. H. Halse has purchased a site on Beach avenue on which he proposes the erection of a fine hotel.—Building permits have been granted as follows: Robert McKay, house Third avenue, $1,200; W. H. Harcus, house, Triumph street, $1,400; J. E. Wright, house, Ninth avenue, $1,500; J. Laidlaw, house, Tenth avenue, $1,500.—A five story hotel is to be erected on Grouse mountain to cost $100,000. Dr. McGuigan is interested.—A site has been purchased for a new fire hall, corner Salsbury drive and Charles street.

WINNIPEG, MAN.—H. B. Rugh, architect, will receive tenders up to September 29th for the erection of a brick apartment building 43 x 70 feet on Rose street, Fort Rouge.—The City Engineer has reported on new bridge over the Red river at the foot of McDermot avenue, cost $240,000.—The Committee of Works are this week receiving tenders for granolithic walk on Maryland and James streets also for sewers and macadam pavements.—The City Council gives notice of its intention to construct asphalt pavements on Salter, Monkman, Rorie and Maple streets and Sargeant and Sutherland avenues, also a number of granolithic walks and sewers.—Plans for a large brewery on Beaconsfield street are being prepared.—The Cockshutt Plow Co. are preparing to make a three story addition to their warehouse on Princess street.—A. C. N. R. official states that the general terminal, locomotive and car repair shops for the western system will be located at Fort Rouge.—Two new fire halls are to be built, one in ward three, the other in either ward four or five.—The Works Committee have recommended the construction of the following sewers: In Mountain ave., cost $23,700; in Notre Dame avenue, cost $8,270; in Anderson avenue, cost $3 800 and several other works.—The Water Supply Commission will have a survey made of the country between the city and East Shoal lake to see if water can be brought from there by gravity.

TORONTO, ONT.—Plans for the new Knox church building have been adopted by the Committee and work will soon begin, cost about $100,000.—A new mission church is to be erected by the Dovercourt Anglican church, corner of Davenport and Dovercourt roads. Kingsmill, Hellmuth, Saunders and Torrence have purchased property on Sorauven avenue which it is understood is for an American firm of manufacturers to build on.—The Board of Control have decided to call for tenders immediately for the substructure for the proposed Lansdowne subway.—Tenders are wanted at 878 Palmerston avenue for plumbing, tinsmithing and plastering three houses.—Tenders are wanted for excavation and mason work. Plans at 398 Spadina avenue.—The Building Committee of the Kenilworth avenue Baptist church are soliciting subscriptions for the erection of a large church on Waverley road.—The Board of Education have instructed the Property Committee to report on building a large school on the Manning avenue site.—The plans for the new Island Bath House have been approved by the Island Committee.—F. W. Stair, proprietor of the Star theatre, has announced that he intends beginning the erection of a burlesque theatre, corner Queen and Bond streets cost $150,000.—Tenders are wanted at 388 Spadina avenue for masonry, bricklaying, carpentry, etc., on dwelling.—Tenders are wanted for plastering and plumbing a pair of houses, Plans at 78 Charles street.—The City Engineer has been authorized to report on the removal of the South Parkdale station to Sunnyside.—Several sets of plans have been prepared for the new Union station and have been submitted to the C. P. R. authorities.—The new building of St. Anne's Episcopal church, corner Gladstone avenue and St. Anne's road will begin early in the spring, cost about $35,000.—Building Permits have been issued as follows: George Watson, 2-story brick dwelling, Curzon street, near Queen, cost $1,200; Mr. Marshall, 2-story roughcast dwelling, Hallam street, near Shaw, cost $1,800; Methodist Book Room, 6-story brick addition to factory, Temperance street, cost $30,000; K. J. Allison, 2½-story brick dwelling, Isabella street, near Yonge, cost $4,500; J. Armstrong, pair 2-story and attic brick dwellings, 159-161 University avenue, cost $6,000; Rose E. Holland, pair 2-story roughcast dwellings, Clinton street, cost $1,800, A. Wilkins & Co., 2-story brick dwelling, Avenue road, near Roxborough avenue, cost $2,700; Thomas Johnstone, 2-story frame dwelling, 88 Doel avenue, cost $1,000; Thomas Butler, pair 2½-story brick dwellings, Markham street, near Lennox, cost $6,000; James Beck, 2-story roughcast dwelling, Thorne street, near Shaw, cost $1,000, Chas. Snow, 3-story brick store and dwelling, corner College and Deleware avenue, cost $6,000; J. Small, 2-story brick dwelling, St. Clarens avenue, near Bloor street, cost $3,000; George Alexander, 2½-story brick dwelling, Lynd avenue, near Dundas street, cost $2,000; H. F. Squires, 4 pair 2-story and attic brick dwellings, corner Lennox aud Bathurst streets, cost $18,000; Herbert Galbraith, pair 2½-story brick dwellings, 268-271 Beatrice street, cost $4,400; W. H. Ellis, pair 2-story and attic brick dwellings, 618 620 Huron street, cost $6,500; J. C. Maxwell, 2-story roughcast dwelling, brick front, Lappin avenue, near Dufferin street, cost $1,700; William Vanhorne, 2-story roughcast dwelling, brick front, Dagmar avenue, near Jones, cost $1,200; W. E. Dool, pair 2-story and attic brick dwellings, 28-30 Beatrice street, cost $5,500.

FIRES.

G. N. R. station, freight shed and water tank at Garneau, Que., completely destroyed.—Apple evaporator building at Watford, Ont., owned by R. J. Graham, Brockville, completely destroyed.—Melrose Abbey cheese factory, near Havelock, Ont., completely destroyed.—The fire brick factory of Jones Bros., Christie street, Toronto, loss $6,000.—Stritsel's general store and Guillard's livery barn at Watson, Sask., loss about $20,000.—Globe Hotel and stables at Ceylon, Ont., loss $3,000.—Fruit warehouse of Titterington Bros., Balfour street, St. Catharines, Ont., loss $2,000.—Public school building, Stoughton, Sask., loss $5,000.—Gilmour Hotel, Bank street, Ottawa, loss $75,000.—Wood-working factory of C. W. Gibbs, 514 Dufferin avenue, Winnipeg, loss $10,000.—The Presbyterian manse, and a large quantity of lumber of Ritchie Bros., at Aylmer, Que., loss $88,000.—Buildings of P. Drolet, St. Augustin, Que., loss above $2,000.—The cheese factory of P. Alford, at Kendall, Ont., completely burned.—Machine shop of Ontario Sugar Company's factory, at Berlin, Ont., loss $6,000.—Stock barn of Hon. W. C. Edwards, at Rockland Ont., loss $5,000. — Wm. Oke's earns with contents, Whitby, Ont., loss $3,000.

CONTRACTS AWARDED.

WOLSELEY, SASK.—$30,000 debentures: Confederation Life Association, Toronto, purchasers.

STETLER, ALTA.—$6,000 school debentures: Nay, Anderson & Co., Regina.

YORKTON, SASK.—$5,000 school debentures: Nay, Anderson & Co., Regina.

QU'APPELLE, SASK.—$5,000 debentures: Nay, Anderson & Co., Regina.

STRATHCONA, ALTA. — $15,000 school debentures: National Trust Co.

VEGREVILLE, ALTA. — $15,000 school debentures: Nay, Anderson & Co., Regina.

LAVEY, ALTA.—Erection of business block for Mrs. Hetu, of Edmonton: A. J. Atkins, Strathcona, contractor.

YARKER, ONT.—Kelsey system of heating in Methodist church: James Smart Manufacturing Co., Brockville, contractors.

RED DEER, ALTA.—Erection of new fire hall: McKee & Cruickshanks, contractors.

CHIGNECTO, N. S.—Masonry of new power house for Maritime Coal, Railway & Power Co.: J. N. Page, Amherst, contractors.

VANCOUVER, B.C.—Erection of business block on Hastings street for Mayor Buscombe: Smith & Sherbourne, contractors.

WELLAND, ONT.—New buildings for the Iroquois Motor Car Co.: Provincial Construction Co. of Toronto, contractors.

PINCHER CREEK, ALTA. -Erection of mill and elevator for the Pincher Creek and Elevator Co.: Scott Bros., contractors.

ST. THOMAS, ONT. — Erection of brick residence corner Southwick and Erie streets for A. S. Smith : F. G. Hill, contractor.

PICTON, ONT.—The work of building the new Carnegie library will be done by day labor under the superintendence of John Burns & Son.

COOKSTOWN, ONT. — Erection of Union Bank building: William Robinson, contractor, cost about $5,000. Bond & Smith, architects, Toronto.

HAMPTON, N. B.—Erection of new school building: George Langstroth and J. W. Smith, contractors, cost $13,000. J. E. Fairweather, architect

STRATHCONA, ALTA.—Erection of residence for priest in connection with St. Anthony's church: Thomas Page, Edmonton, contractor, cost $4,000.

FRELIGHSBURG, QUE.—Installation of Kelsey system of warming and ventilation in R. C. church: James Smart Manufacturing Co., Brockville, Ont., contractors.

ST. GEORGE DE HENRYVILLE, QUE.—The James Smart Manufacturing Co., Brockville, Ont., have secured the contract for installing the Kelsey system of heating in the R. C. church.

MONTREAL, QUE. — Construction work on No. 5 station. Iron work, H. R. Ives & Co., $8,888; roofing, W. F. Powell & Co., $885; painting and glazing, Charles Fortier, $1,114; electric wiring, W. J. O'Leary, $425.

OTTAWA, ONT. — Remodelling and enlarging Bell Telephone building: Stone work and masonry, Thoms & Bouthilier; carpentry, Charles Hopewell; painting, A. J. Carson; roofing, MacFarlane & Douglas; plastering, John Sutherland.

WINNIPEG, MAN. — Works at St. Andrew's rapids: Quinlan & Robertson, Montreal, contractors.—The Fire, Water & Light Committee have recommended the acceptance of the following tenders: Erection of transformer house, warehouse and repair shop for electrical department, John Saul, at $15,750; supply of 2,000 half-inch Empire meters, National meter Co. at $12.50 each; water pipe and specials, William Jacks & Co., at $4,020.82; valves, T. McAvity & Sons, at $4,581; hydrants, Canadian Fairbanks Co, $9,375.

TORONTO, ONT.—One of the tenderers for work on schools, John McLeod, having made an error in his estimate for stone work on Phoebe street, Dewson street and Kew Beach schools, omitting to reckon the cut stone, the property committee allowed him to withdraw his tenders, and accested the next lowest tender. Mr. McLeod was awarded the contract for carpentering for $29,450, being the lowest. The masonyy contracts accepted were: Phoebe street, A. Webb, $48,929; Dewson street, Lucas & Son, $6,880; Kew Beach, Lucas & Son, $6,636.

CORRECTION.

By mistake, the address in the advertisement of the Ideal Concrete Machinery Company in our last issue, was given as South Bend, Ind., instead of London, Canada, where the company have recently established a factory.

The firm of Proulx & Paquin, plumbers, Montreal, will be succeeded in business by E. Proulx.

S. L. Lynott and R. Keating, of Red Beach, Me., have leased the larrigan factory at St. Andrews, N. B., and intend entering upon the stone business. It is their intention to put in a "Jenny Lind" polishing machine and begin work at once.

Geo. H. Bradbury, manager of the Manitoba Pressed Brick Company, states that a company has been organized for the purpose of instaling a sand-lime brick plant at Regina. Mr. Bradbury says the Berg system has proven a great success, there being over 100 plants operating under this system in the different states to the south. In Canada the Ottawa, Toronto, Port Arthur plants are all doing excellent work and producing a very fine brick, The Regina plant will be up-to-date.

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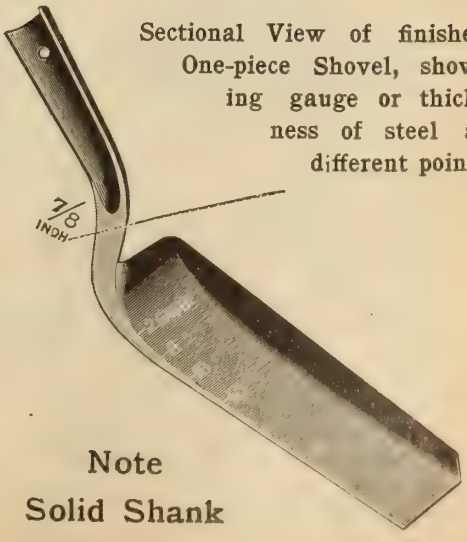


Sectional View of finished One-piece Shovel, showing gauge or thickness of steel at different points

Note Solid Shank

AN ECONOMICAL CONCRETE ABUTMENT.

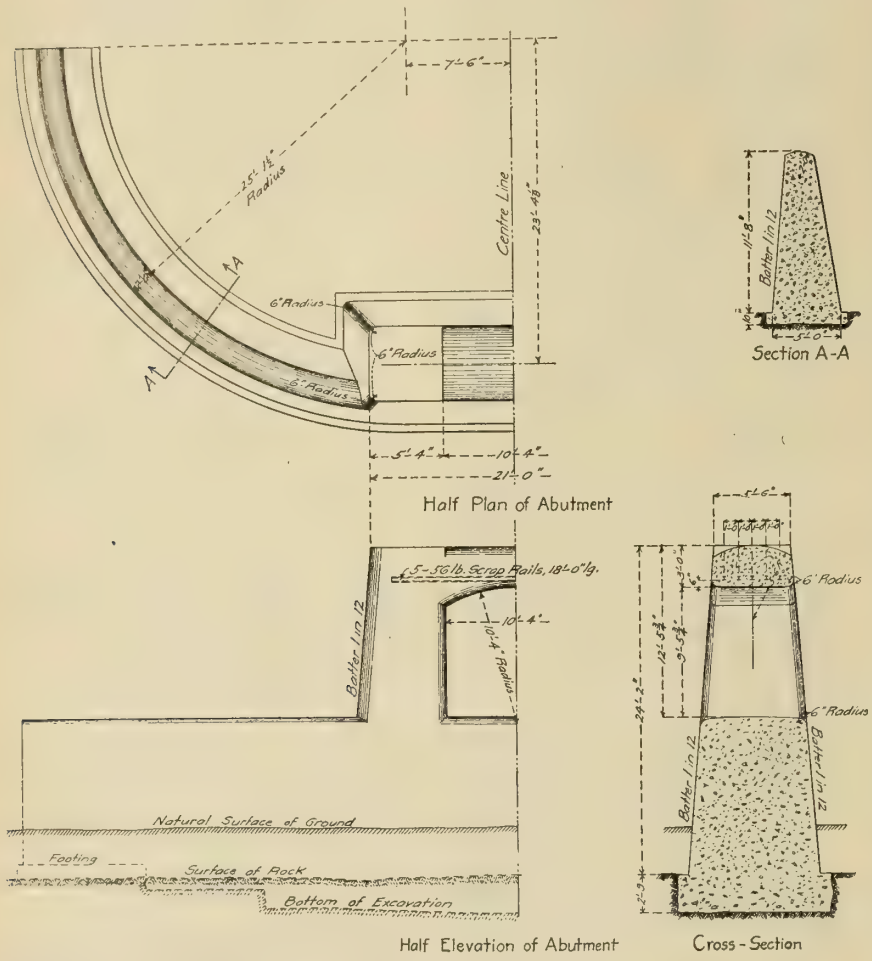
By C. R. Young.*

A concrete abutment of economical design was recently constructed at the Etobicoke River, about seven miles west of Toronto, on the Mimico Division of the Toronto & York Radial Ry. The railway, which is an electric one, carrying a heavy suburban traffic, crosses the river valley by 600 ft. of wooden trestle, a 140-ft. through truss steel span and 800 ft. of fill, averaging 18 ft. deep, commencing immediately to the west of the 140-ft. span, thus necessitating an abutment at this point.

Saving in concrete was effected in two ways. First, the fill was stopped 30 ft. from the center of the abutment and allowed to slope down all around on a slope of 1½ to 1 to the circular wing walls, the tops of which are slightly above high water mark. A short wooden trestle, put in before filling commenced, carries the traffic from the bridge on to the fill. Second, a saving of some 24 cu. yds. of concrete was effected by leaving an arched opening in the center of the abutment where the material is ineffective.

Details of the structure are shown by the accompanying illustration. The arch between the truss-seats was reinforced by five 56-lb. scrap rails, placed 1 ft. apart as shown. This reinforcement was for the purpose of tying the "towers" rigidly together and to ensure the arch carrying without danger the ends of the stringers from the temporary trestle across the river, which were supported on a cradle resting on the arch.

The design was that of Mr. James McDougall, Assoc. M. Inst. C. E., Chief Engineer of the railway. The conerete work was done by Mr. O. Hicks, Humber Bay, Ont.



CONCRETE ABUTMENT, TORONTO AND YORK RAILWAY.

*Assistant Engineer, Toronto & York Radial Railway, Toronto, Ont.

CIVIL ENGINEERS' EXCURSION.

The party of Civil Engineers touring through western Canada, arrived at the Mountain View Hotel, Shepard, Alta., Wednesday morning, where they disembarked and were met by Mr. J. S. Dennis, superintendent of irrigation, and the local irrigation officials and engineers, who escorted them to the scene of inspection. Lunch was served in a tent at the engineers' camp. Afterward they proceeded on their journey westward and arrived in Vancouver, B. C., on Saturday morning. A number of prominent local members of the civil engineering profession met the visitors on the arrival of their train. Among those who extended welcome were Mr. H. J. Cambie, consulting engineer of the C.P.R.; Mr. James Forde Garden, M.L.A.; Mr. George H. Webster, president of the British Columbia Contract Company; Col. Tracy and Mr. W. A. Clement, City Engineer.

In the afternoon the visiting engineers left at 2 o'clock on the steamer Joan for the works of the Vancouver Power Company on the North Arm of the Inlet. After an inspection of the hydro-electric plant at that point the party returned to the city. During the morning, the tourists in small parties visited the sawmills and other points of interest about the city.

On Sunday evening they left for Victoria and spent Monday there, being taken about the city in tally-hos, while a large party went by launch to visit the dry dock and the marine railway at Esquimalt in charge of Mr. Devereux. In the afternoon under the guidance of Mr. Mohun the parliament buildings, including the museum, were visited.

In the evening a number of the visitors attended the reception to Their Excellencies, Lord and Lady Grey, in the parliament buildings and left by the steamer Charmer about midnight for Vancouver. On Tuesday morning at 10 o'clock their special train left and the trip eastward began. They proceeded by the Crow's Nest Pass route visiting Rossland, Grand Forks, Phoenix, Greenwood, Nelson, Kootenay, Moyle and Coleman. From there the party proceeded to Fort William thence to Montreal.

Riddell & Thomas, builders, Dauphin, Man., have dissolved partnership.

Sidney A. McDonald, contractor, Montreal, has registered his business under the firm name of W. McDonald & Co.

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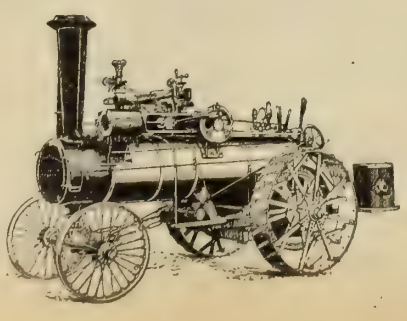

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Halifax	30,000 sq. yds.	Amherst	8,000 sq. yds.
Regina	21,215 sq. yds.	St. Catharines	4,600 sq. yds.
St. Boniface	18,272 sq. yds.	Total	129,161 sq. yds.

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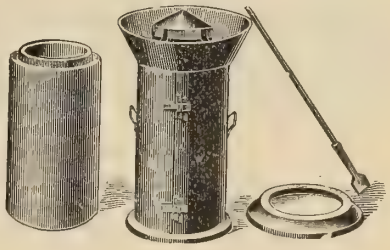

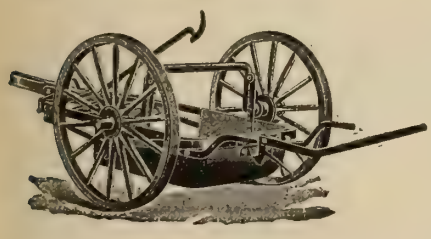

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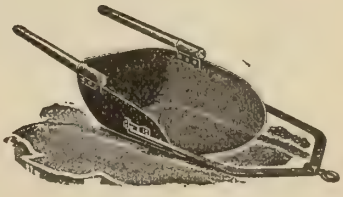

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Peterborough Steel Rolling Mills Company, Limited, Peterborough, Ont., incorporated, capital $200,000. Directors W. Ferguson, W. Rudkins, R. J. Munro, A. Dunn, R. H. Fortye, D. O'Connell and A. Elliott.

Southampton Furniture Company, Limited, Southampton, Ont., incorporated, capital $200,000. Directors, J. H. Spence, F. H. Phelan, F. W. Carey, and others, all of Toronto.

Ontario Oil & Refining Company, Limited, Chatham, Ont., incorporated, capital $100,000. Directors, C. T. Hobart, G. W. Harrison, T. K. Holmes, J. M. Pike and J. Symon.

Interprovincial Mining Company, Limited, Haileybury, Ont., incorporated, capital $1,500,000. Directors, W. A. Weir, and J. A. Ewing, Montreal, A. Lay and T. H. Steele, Haileybury, and L. J. Labrosse, Hawkesbury East.

Huronian Cobalt Silver Mining Company, Limited, Cobalt, Ont., incorporated, capital $500,000. Directors, J. R. Gamble, W. A. J. Bell, T. Langton, and others.

J. Vansickler & Company, Limited, Toronto, incorporated, capital $40,000 to carry on the business of builders, contractors and roofers. Directors, G. H. Kemmis, G. Grant, and others.

British-American Silver Company, Limited, Toronto, incorporated, capital $50,000. Directors, J. E. Elliott, W. H. Wallbridge, and J. E. Davies.

Wright Silver Mining Company, Limited, Toronto, incorporated, capital $200,000. Directors, T. Harder, F. C. Elks, E. B. Ryckman, and others.

Keewatin Lumber Company, Limited, Keewatin, Ont., incorporated, capital $250,000. Directors, E. W. Backus, W. F. Brooks, A. E. Horr, aud W. H. Flanagan, all of Minneapolis, and D. McLeod, Keewatin.

Toronto Furniture Company, Limited, Toronto, incorporated, capital $40,000. Directors, D. K. Ridout, D. C. Ridout, T. P. Johnstone, and others.

Twin Lake Mining Company, Limited, New Liskeard, Ont., incorporated, capital $500,000. Directors, J. Ruby, H. Dorrow, New Liskeard; and T. Passmore, North Bay.

Exeter Canning & Preserving Company, Limited, Exeter, Ont., incorporated, capital $40,000. Directors, J. Snell, J. G. Jones, C. Sanders, T. Harvey, S. Martin, A. Marchand, W. Sanders, and J. Hunter.

Canada Mines Limited, Toronto, Ont., incorporated, capital $100,000. Directors, H. C. Barber, J. A. Gormaly, R. T. Shiell, H. L. Dunn, and others.

Williams Copper Mining Company, Limited, Toronto, incorporated, capital $100,000. Directors, J. F. Lennox, D. A. Rose, and M. W. Mayor.

Fort Francis Lumber Company, Limited, Fort Francis, Ont., incorporated, capital $60,000. Directors, W.A. Preston, Fort Francis; W. Blackwood, Winnipeg; W. J. Elliott, Toronto; and H. J. Tharle, Fort William.

Toronto Waterloo Office Fixture Company, Limited, Waterloo, Ont., incorporated, capital $75,000. Directors, G. Deisenroth, G. H. Haberstadt and J. H. Mitchell, all of Toronto; A. Bauer and John Letter, Waterloo.

Benjamin Moore & Company, Limited, Toronto, incorporated, capital $50,000, to manufacture and deal in paints, wall finishes, oils, etc. Directors, H. B. Johnson, J. H. Whitehead, E. W. Wright, C. W. Thompson, and E. M. Gardiner.

Bailey Mining Company, Limited, Windsor, Ont., incorporated, capital $500,000. Directors, E. A. Benson, Chicago; H. B. Wright, R. A. Bailey, L. S. Trowbridge, J. H. Harris, and J. P. Glendon, all of Detroit, and A. R. Bartlet, Windsor.

National Mining & Developing Company, Limited, New Liskeard, Ont., incorporated, capital $40,000. Directors, K. Farrah, J. J. Grills, J. W. Bolger, and others.

Golden Reed Mining Company, Limited, Sault Ste Marie, Ont., incorporated, capital $1,200,000. Directors, R. J. Miller, St. Thomas; G. Reed, Michipicoten River; M. Gates and A. E. Sharp, Sault Ste Marie, Michigan, and F. M. Dole, Sault Ste Marie, Ont.

COST OF DRIVING AND PULLING TEST PILES, HACKENSACK RIVER, N. J.

A pile was driven every 50 ft. across the Hackensack River, N.J., to test the nature of the bottom. Three 90-ft. piles were used, and were pulled after driving. The cost the word includes the cost of pulling as well as driving.

A scow driver was used, and the work was done at cost plus 10 per cent. for superintendence. The total number of feet penetrated by the piles was 634, or about 57½ ft. as an average of 11 piles, 8 of which were driven to rock. The material penetrated was mud, sand and clay.

The work occupied 4½ days, of which 1¼ days were spent in transporting the driver to the site of the work and removing it from the work after completion.

The cost was as follows:

Foreman, 4½ days at $4	$18.00
Machine men, 45 days at $3	135.00
Watchman, 4 nights at $3	12.00
Total	$165.00
Add 10 per cent. for profit	16.00
Total	$181.50

This is at the rate of 30 cts. per linear foot of penetration for driving and pulling, but it does not include the cost ot coal. Coal wae probably less than ½ ton per day, or say $10 for the whole job, or less than 2 cts. per foot.

The cost of materials was as follows:

3 piles 90 ft. long, at $25	$75.00
2 spruce piles, 52 ft. long, for use as followers, at $4	8.00
4 pile bands, at $2.50	10.00
Total	$93.00
Add 10 per cent. for profit	9.30
Total	$102.30

This is equivalent to about 16 cts. per linear foot of pile penetration. The total cost was therefore:

	Per ft. Penetration.	Per Pile.
Labor	$0:30	$16.50
Coal	.02	0.90
Materials	.16	9.30
Total	$0.48	$26.70

It will be noticed that there were 10 men and 1 foreman on the driver, which is an unusually large number; and it will also be noted that the wages paid the "machine men" were very liberal.

Since only 3¼ days were actually spent in driving, the average day's work was 3 piles driven and pulled. If an ordinary scow driver crew of 6 men at $2, and 1 man at $4, had been employed, the daily wages would have been $16. To which add $2 for coal and $6 for rental of plant, making a total of $24 per day for driving and pulling 3 test piles, or $8 per pile. Even $8 per pile would be a high cost for such work, when done by contract, if the cost of moving the driver to and from the site of the work is not included.

In view of the valuable information gained at small expense by driving test piles, it is surprising that engineers do not oftener test the bottom of rivers in this way before drawing plans and specifications for bridge foundations, trestles, etc. When a contract has been awarded for foundations, the first thing that the contractor wants to do is to order his piles. The engineer usually refuses to furnish a bill of materials until enough piles have been driven to determine the character of the bottom. This delays the whole work, and adds materially to the contractor's expense. Moreover, it usually results in a change of specified lengths of piles, and a corresponding change in the ultimate cost of the job. The time to drive test piles is before the award of a contract, not afterward.—Engineering—Contracting.

The building returns for Calgary, Alta., for the month of August was $19,957 less than in the previous month The actual number of permits issued was thirty-three for August of which the total value amounted to $108,500 against $128,457 for the previous month.

GERMAN ALSEN, at higher prices than competitors has again this year been awarded the most important contracts of the because practical tests by leading Engineers proved its merit and relative economy. Note the following:

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X DAM (shipping instructions so far 60,000 bbls.) approximate amount	175,000 bbls.	COVMT. ORDER SOUTH AMERICA	150,000 bbls.
XOCHIMILCO WATER WKS., MEX. approximate	200,000 bbls.	RIO DE JANEIRO, SANTOS, ETC.	40,000 bbls.

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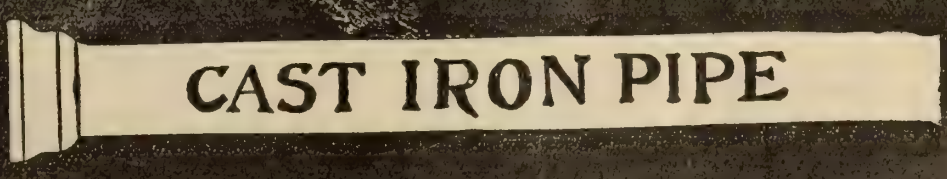

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THE WATERWORKS OF WINNIPEG, MAN.

There is no Canadian waterworks system which presents more features of interest to the engineer than that of Winnipeg Man. The first work were constructed by a private company, but ten years ago the city authorities decided that municipal ownership offered the only way to obtain a satisfactory service for a place growing so rapidly as this. Two years were spent in obtaining the necessary legal powers for this purpose. The old works were then bought for $237,000, and their extension and improvement were immediately undertaken. All this work has been under the charge of Col. H. N. Ruttan, city engineer.

Two sources for a municipal supply were investigated, the Assiniboine and Red rivers and ground water. An examination of the river from Portage la Prairie to Winnipeg disclosed the fact that the Assiniboine was the main sewer of the country—offal was gotten rid of by throwing it into the river, enclosures for cattle and pigs were fenced with a corner in the river, and barnyards were drained into it. It was felt that even the most perfect filtration would not remove the disagreeable impression, that after all, the water was nothing more or less than purified sewage, and that the only excuse for its adoption as a permanent supply for the city would be that it was the only one available. With the exception that the flow was larger, and water softer, the same objections applied to the Red River. It was found that in addition to its great cost, the Winnipeg River water would require to be filtered to remove the large quantities of the suspended organic matter which it contained.

One of the ground water sources investigated was at Poplar Springs, 17½ miles from the city, where there is a large amount of water available. The cost of bringing it to the city will be large, however, and for this reason it is considered best to defer its use until later. There is a large amount of ground water within and near the city and investigations of its quality and quantity were made. Tests with the air lift showed that the water in all the wells was under the same head, and it is considered likely that the artesian basin is supplied from a number of sources. After a full review and investigation of the situation by Mr. Rudolph Herring, consulting engineer, of New York, it was decided to sink a pump well. It was estimated that from this well and a line of conduit 5,000 ft. in length, connected to tube wells, a supply of 2,400,000 imp. gal per day could be obtained. After construction, it was found that the yield from this well alone, at a pumping depth of 38 ft. below ground level, was upwards of 2,400,000 gal. per day, and this being more than sufficient for the requirement of the city at the time, nothing was done towards the construction of the tube wells and conduit.

It shortly became evident that the city was going to grow very rapidly and that something should be done towards increasing the supply. The great quantity of water obtained from the first well completely changed the aspect of the develop-

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BY

The City Engineer of Toronto for 1903-4

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Year.	No. Samples Tested.	Soundness Faiji Test.	Specific Gravity	Residue in Test on No. 100 Sieve	Setting Time in Minutes		Tensile Strength in pounds per square inch.									
							Neat.					3 (Sand) to 1 (Cement)				
					Initial	Final	1 dy.	7 dys.	28 dys.	3 mos.	1 yr.	1 dy.	7 dys.	28 dys.	3 mos.	1 yr.
1903	20	O.K.	3.135	2.1	162	345	307	701	783	827	*	74	214	299	367	*
1904	44	O.K.	3.150	2.0	132	342	300	744	848	914	938	86	262	354	401	427

* Tests for 1 year were not completed when records closed. 1905 report not yet issued.

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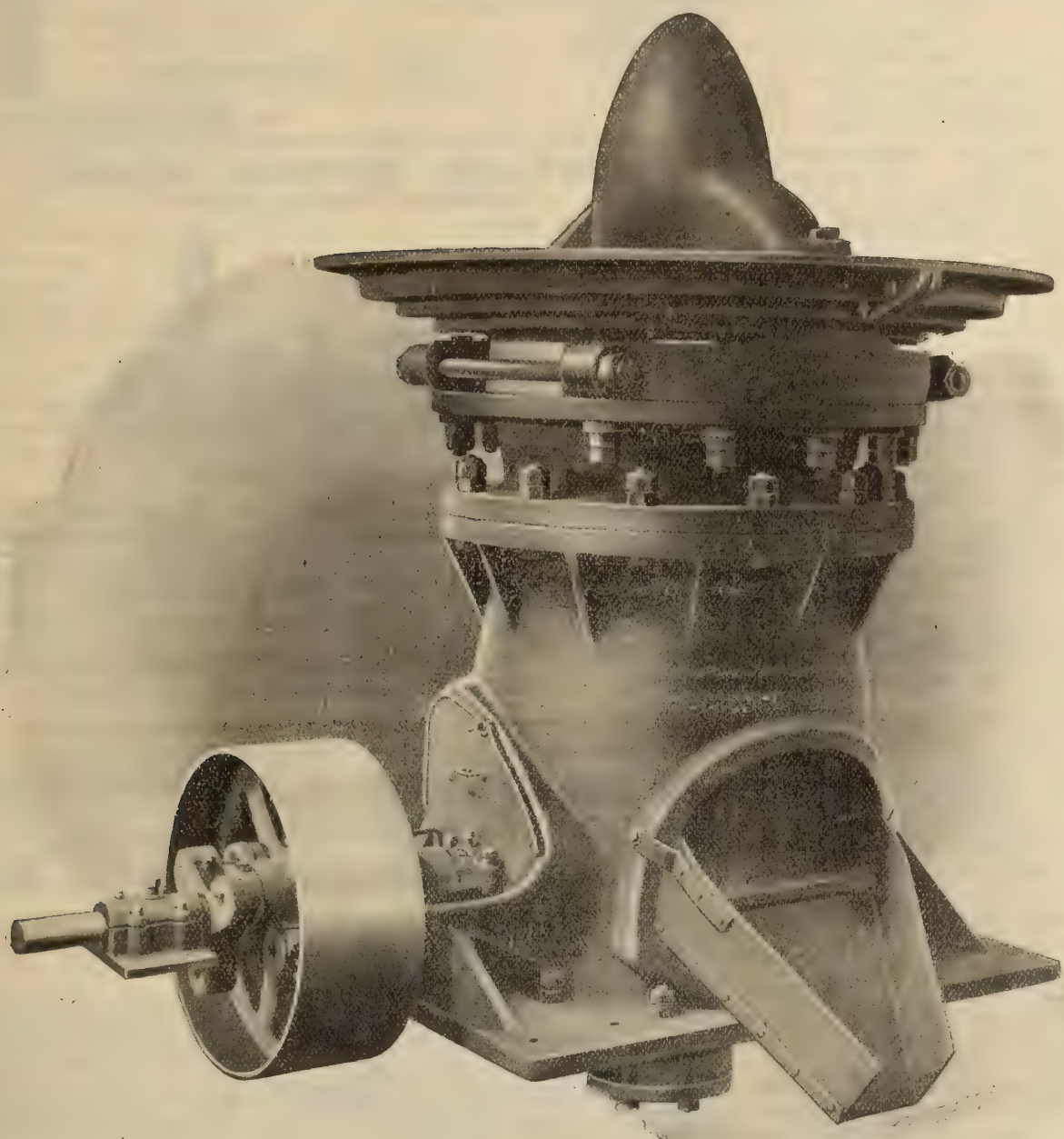

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VANCOUVER : 416 Seymour St.

ment, and led to the substitution of the large deep well system for the tube wells and conduit first proposed.

Owing to the large flow of water, great difficulties had been experienced in sinking the first well, the inrush of water carrying with it soil from outside the well, curb, undermining the foundations of the buildings, and making it necessary to stop the well short of the rock and put in a strainer of broken stone and concrete.

Looking to the necessity for taking more full advantage of the artesian supply, it was evident that the next well should be sunk into the rock, and that the curb and pumps should be placed upon the rock. It was also considered that the principal wells should be in duplicate, so that in case of an accident to one, the other could be brought into service. With these objects in view it was decided to sink well 1 into the rock and to construct well 2 as a duplicate or reserve. The system of unwatering by pumps used in the construction of well 1 had, owing to a large flow of water, proved ineffective. It was necessary, if the construction was to be under complete control such as would enable the permanent pumping machinery to be erected at rock level, and the pump suctions extended into the rock, that some other system of unwatering should be adopted. It was, after consideration, decided to use the pneumatic caisson system of sinking the well. A double steel shell caisson 18 ft. in diameter filled between the shells with concrete, was constructed at ground level, and sunk in the usual way. When water was reached, an air lock was attached to the caisson and the work of sinking continued under air pressure, sufficient to keep out the water, until the caisson reached the rock. The cutting edge was then sealed to the rock by concrete, 6-in. inlet pipes for the water being set in at rock level. A shaft 10 ft. in diameter was then sunk into the rock for a distance of 16 ft., and a gallery driven for a distance of about 40 ft. The pump suctions extend into the shaft sunk in the solid rock. This system of sinking was found to be most efficient, the water being easily controlled, and all kinds of work, including setting up the machinery at the bottom of the well, were executed without difficulty.

Well 2 yielded 4,500,000 gal. when tested soon after completion, but has decreased on account of some obstruction in the inlet pipes by sand and gravel, which can be removed. Wells 3 and 4, under construction, will yield volumes, which are estimated by Col. Ruttan in connection with the discharge of Nos. 1 and 2 as follows: Nos. 2 and 3, 6,000,000 gal.; Nos. 2, 3 and 4, 8,000,000 gal. Well 1 will be completed like No. 2, and its yield in-

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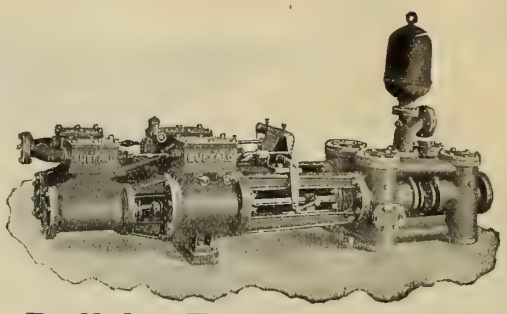

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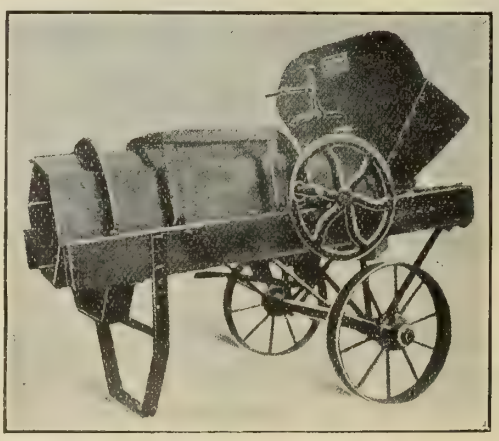

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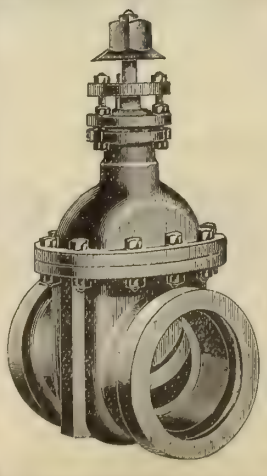

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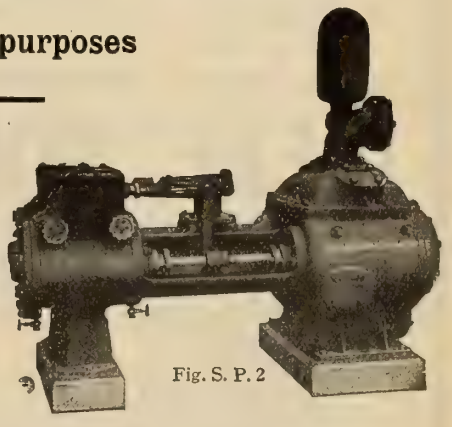

Fig. S. P. 2

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In order to equalize the draft on the wells and furnish storage capacity on which to draw in times of heavy consumption, a 6,000,000 gal. reservoir has just been completed. The water is raised from the wells by pumps of 15,000,000 gal. capacity, and is delivered to the city by a 5,000,000-gal. triple-expansion pump and an electrically-driven centrifugal pump of the same capacity.

The water is very hard and is softened before it is distributed. The artesian well water supplied to Winnipeg contains, in its natural state, the following elements, in round numbers, in the amounts stated: Carbonate of lime, 16 grains per imp. gal.; carbonate of magnesium, 8.5 grains; sulphate of magnesium, 12 grains; sulphate of sodium, 5.5 grains; carbonate of sodium, 3.0 grains; chloride of sodium, 27.5 grains. Other compounds are present in minute amounts and are of no significance in this connection. The constituents mentioned have remained almost constant in kind and in quantity for over five years.

Of the constituents mentioned, only the first three cause the water to be hard. Of these three compounds, the softening process removes only the first two, the carbonates of lime and magnesium. Sulphate of magnesium, while acting to some extent on soap, does not form any scale in boilers. In order to remove it from the water it would be necessary to add soda ash as well as lime. This would involve expense and other objections out of proportion to the benefit gained. The removal of the carbonates of lime and magnesium eliminates rather over two thirds of the hardening substances from the water.

The carbonates in the water are held in solution by carbonic acid gas which the water dissolved from the air or soil before it was able to dissolve the carbonates of lime or magnesium from the rock. Any means which will abstract this carbonic acid from the water will soften it, because the carbonates of lime and magnesium will at once separate from the water. Boiling softens the water for this reason, but it would be impracticable and undesirable to soften a public water supply in this manner. It is possible, however, to accomplish the same thing without the use of heat. If any substance having a strong affinity for carbonic acid is added to hard water, it combines with the acid and sets free the carbonates of lime and magnesium, which thereupon separate and settle out as a white powder, leaving the water soft.

Such a substance is found in the builders' lime of the trade, the best grade being the cheapest to use. For convenience it is slaked and converted into lime water. When the lime water is mixed with hard water, flakes and crystalline matter are observed to separate at once. These consist of carbonate of lime, formed by the union of the lime, which was used with the carbonic acid in the water, also the carbonate of lime which was in the hard water, and lastly, hydrate of magnesium, produced by the action of the lime on the magnesium carbonate in the hard water. It is thus apparent that all of the lime which is used for softening is converted in the process into carbonate of lime, which separates immediately from the water, bringing with it the carbonates which were in the hard water.

The apparatus for preparing and pumping up the lime cream consist of a slaking bed, a mixing well and a ball valve pump. The speed of the pump is regulated from the operating platform. The lime water

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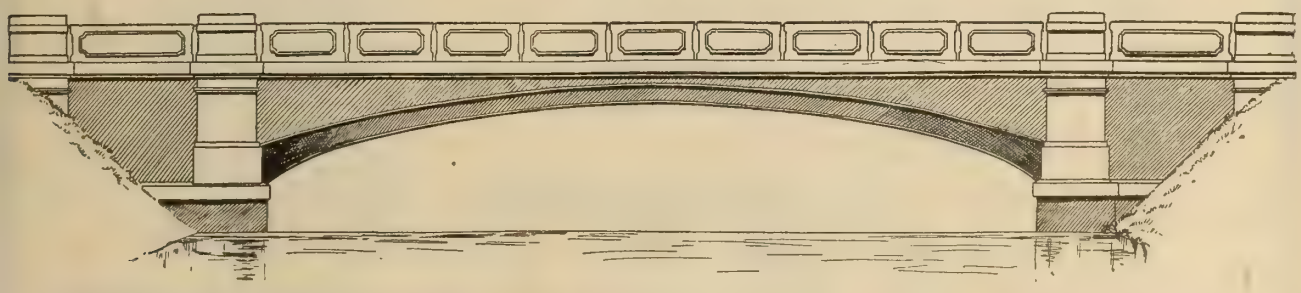

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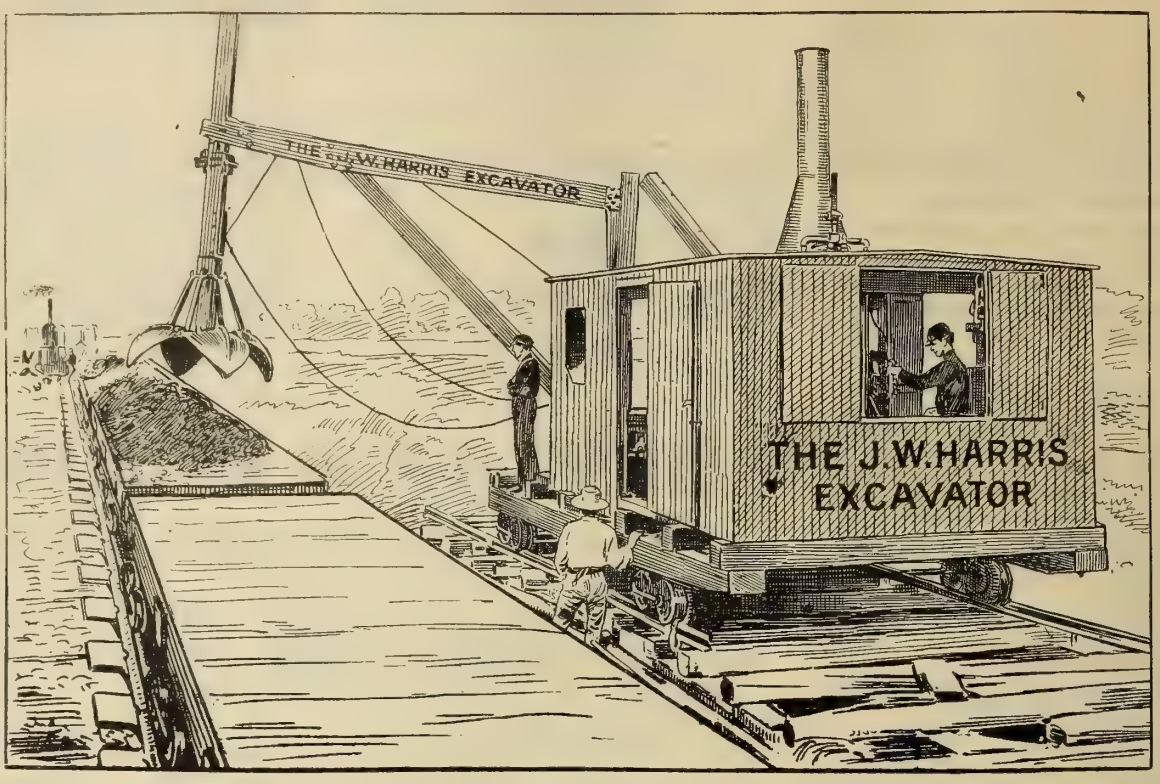

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A description of Winnipeg water supply would not be complete without a reference to the special fire service water works now being constructed in the business center of the city. This system is to take its supply from the Red River. It is to be capable of pumping 13,000,000 gal. of water per day at a pressure of 300 lb. per square inch. The water is to be distributed by about three miles of cast iron pipes, fitted with hydrants of special design, and with hose attachments for 4½ and 3½-in. hose. The pumps being made by Glenfield & Kennedy, of Kilmarnock, will be six in number, four 13½ x 18 in. and two 9½ x 18 in. triple double acting. These will be driven by six Crossley gas engines rated in the aggregate at 2,600 b.h.p. It is hoped that this system will be in operation early next year.

THE PRODUCTION OF CEMENT IN 1905.

The cement industry in the United States in 1905 is the subject of a bulletin recently published by the Division of Mineral Resources of the U. S. Geological Survey.

The number of kilns in use naturally shows an increase, though not, however, corresponding to that of the industry itself. For example, of rotary kilns in 1902, there were 456 active, 9 idle and 46 in process of building; in 1905 there were 722 active, 23 idle, and 42 building.

But along with the increase in the number of kilns, there has been a marked increase in the rate at which the plants were driven, and also in the size of the kilns. For 1902, it is stated, each active rotary kiln averaged a total output of 36,909 bbls.; for 1905 the average output was 48,118 bbls. This increase of about 30% is attributed partly to more steadily driving, and partly to the use of longer kilns. It is estimated that in 1906 an average of over 50,000 bbls. per kiln per year will be

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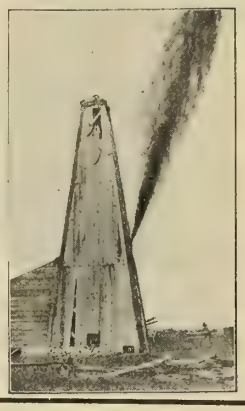

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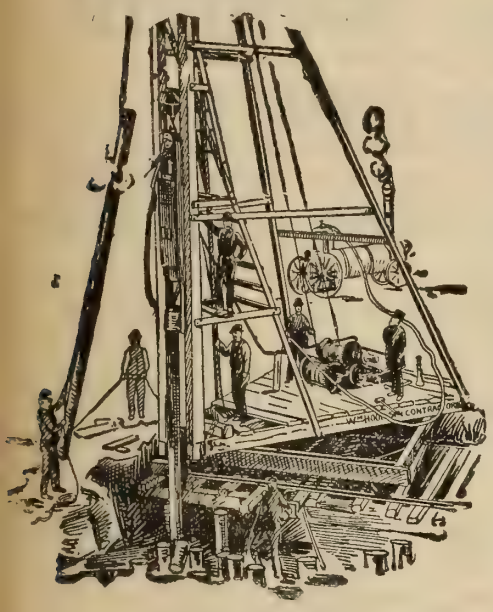

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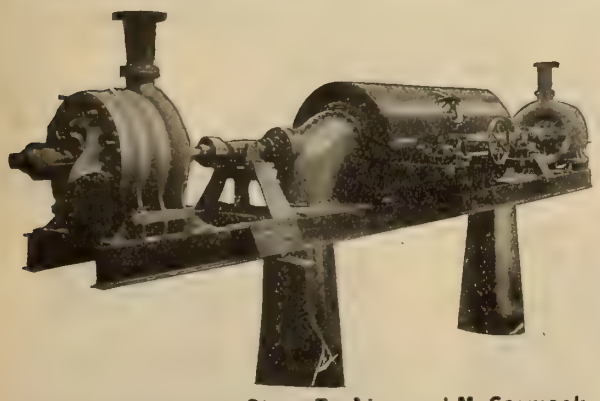

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attained. The increase in the use of rotary kilns shows a marked contrast when compared with the figures for vertical kilns. In 1902 456 vertical kilns were active, 9 idle and 46 building; in 1905, 395 were active 116 idle and none building. Only three factories in 1905 reported productions of Portland cement burned in vertical kilns.

The total capacity of American cement plants for 1905 is reckoned at 129,000 bbls. per day; it is expected that before the close of 1906 the total possible production will exceed 140,000 bbls. per day. Comparing production by years, 1905 shows the greatest gain over the preceding year. To quote from the report:

The increase is 8,427,051 barrels of cement in quantity and $9,899,613 in value, which statement shows most clearly the great bettering of condition in the cement industry in this country in 1905. The total production of cement for 1905 was 40,102,308 barrels, having a value of $35,931,533, as compared with a total production in 1904 of 31,675,257 barrels of cement, having a value of $26,031,920. The production of Portland cement in 1905 was 35,246,812 barrels, valued at $33,245,867.

The production of natural cement in 1905 was 4,473,049 barrels, valued at $2, 413,052. The production of puzzolan cement in 1905 was 382,447 barrels, valued at $272,614.

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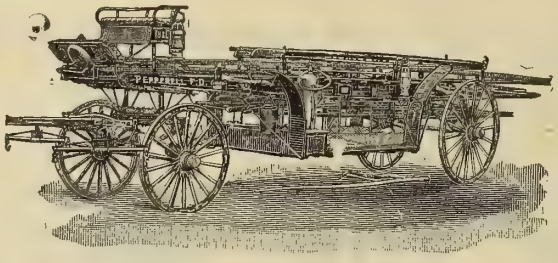

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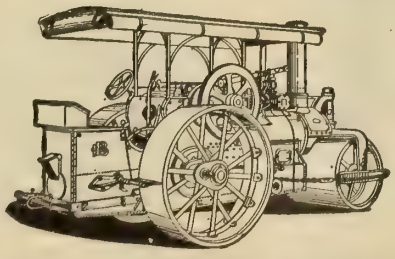

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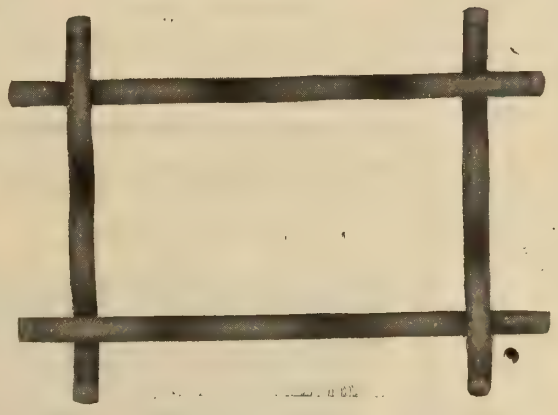

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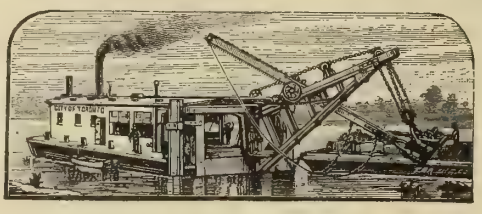

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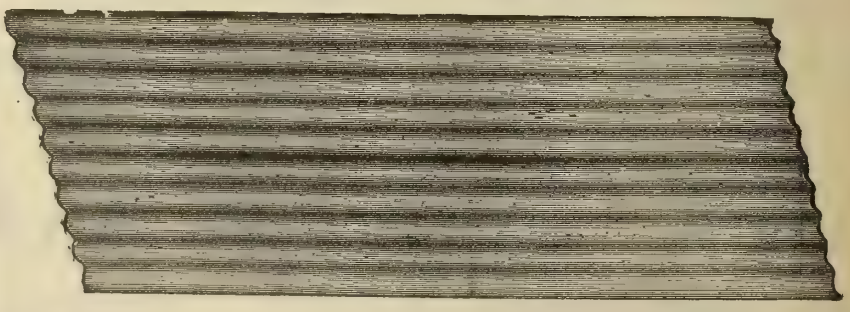

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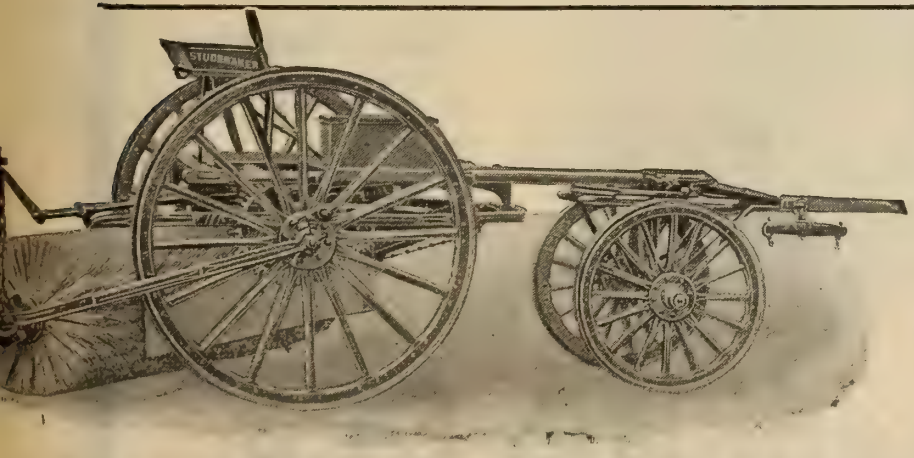

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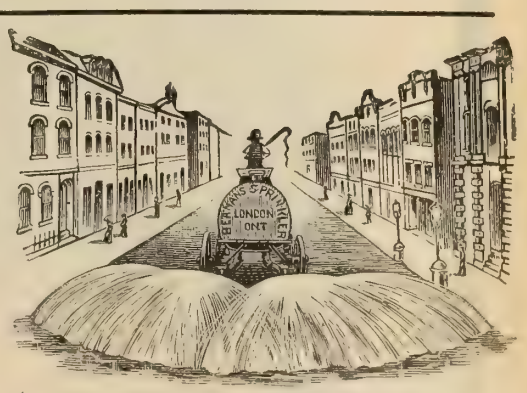

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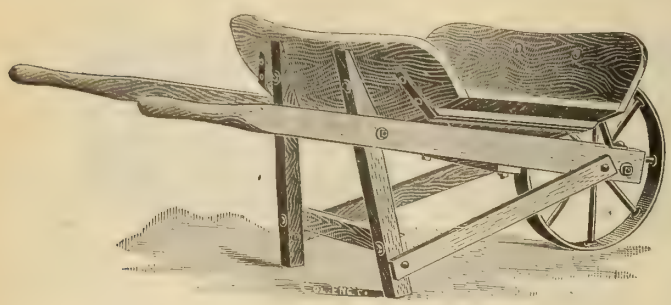

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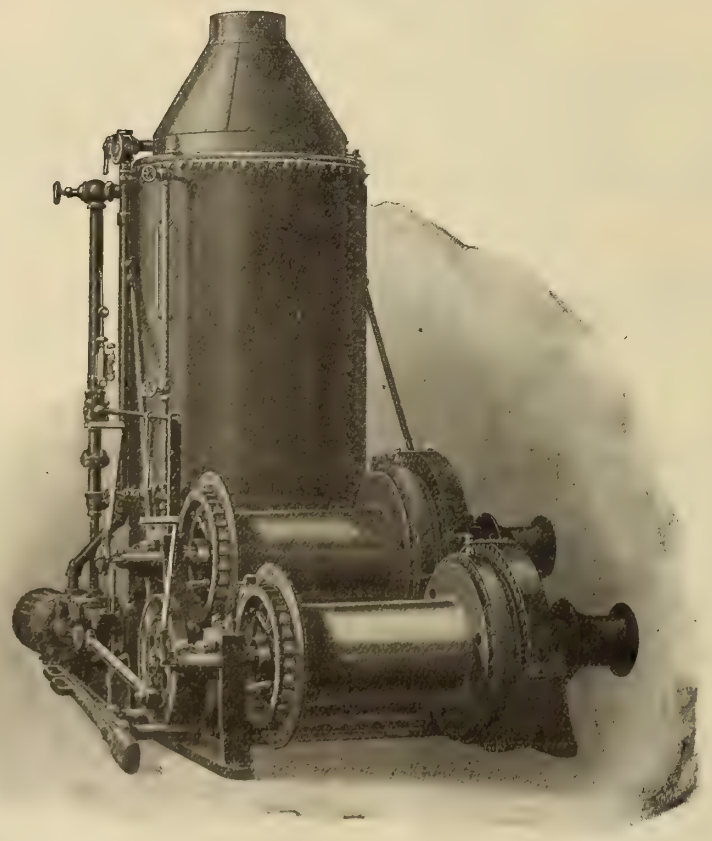

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CANADIAN

Contract Record

A Weekly Journal of Public Works, Tenders, Advance Information and Municipal Progress

This Paper Reaches Every Week the Town and City Clerks, Town and City Engineers, County Clerks and County Engineers, Purchasers of Municipal Debentures and Leading Contractors In All Lines Throughout Canada

VOL. 17. TORONTO, MONTREAL — OCTOBER 3, 1906 — WINNIPEG, VANCOUVER No. 30

THE CANADIAN CONTRACT RECORD
PUBLISHED EVERY WEDNESDAY
As an intermediate Edition of the Canadian Architect and Builder.

THE C. H. MORTIMER PUBLISHING COMPANY
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vacant for a reliable clerk of works experienced in modern conditions of building operations and has no objection to leave city temporarily. Apply giving reference and stating salary, to
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Proposals For Concrete Bridge Piers

Sealed proposals addressed to Alderman J. G. Latimer, Chairman, Committee on Works, for erection of Concrete Piers and abutments for the support of a steel bridge over the Red River at the foot of Redwood avenue, Winnipeg, will be received at the office of the undersigned up to 2.30 p. m. on

TUESDAY, OCTOBER 16, 1906.

Plans, specifications and forms of proposal may be obtained at the office of H. N. Ruttan, City Engineer, Winnipeg, Canada.

Each bid must be accompanied by an accepted cheque or draft payable to the order of the City Treasurer, or cash deposit for a sum equal to 5 per cent of the total amount of the bid, which will be subject to forfeiture in case of failure on the part of the contractor to enter into a written contract with approved sureties if called upon to do so.

The City reserves the right to reject any or all tenders or to accept any bid which appears advantageous to the City of Winnipeg.

C. J. BROWN,
City Clerk.

City Clerk's Office, Winnipeg, September 12th, 1906.

Proposals For Bridge Superstructure

Sealed proposals addressed to Alderman J. G. Latimer, Chairman, Committee on Works, for erection of steel superstructure for Highway Bridge over the Red River at Redwood avenue, Winnipeg, will be received at the office of the undersigned up to 2.30 p. m. on

TUESDAY, NOVEMBER 20, 1906.

Plans, specifications and forms of proposal may be obtained at the office of Col H. N. Ruttan, City Engineer, Winnipeg, Canada.

Each bid must be accompanied by an accepted cheque or draft payable to the order of the City Treasurer, or cash deposit for a sum equal to 5 per cent. of the total amount of the bid, which will be subject to forfeiture in case of failure on the part of the contractor to enter into a written contract with approved sureties if called upon to do so

The City reserves the right to reject any or all tenders or to accept any bid which appears advantageous to the City of Winnipeg.

C. J. BROWN,
City Clerk.

City Clerk's Office, Winnipeg, September 12th, 1906.

NOTICE TO CONTRACTORS

LANSDOWNE AVENUE SUBWAY SUBSTRUCTURE.

Tenders will be received by registered post only addressed to the Chairman of the Board of Control, City Hall, Toronto, Ontario, up to noon on

TUESDAY, NOVEMBER 6TH, 1906.

for the Lansdowne avenue subway substructure.

Envelopes containing tenders must be plainly marked on the outside as to contents.

Drawings may be seen and specifications and forms of tender obtained at the office of the City Engineer, Toronto, Ontario, upon application.

The usual conditions relating to tendering as prescribed by city by-law must be strictly complied with.

The lowest or any tender not necessarily accepted.

E. COATSWORTH, (Mayor),
Chairman Board of Control.

City Hall, Toronto, September 27th, 1906.

Parker & Blender, painters, Hamilton, Ont., have assigned to C. S. Scott.

The Labatt Manufacturing Company, London, Ont., dealers in plumbers' supplies, have opened a branch in Winnipeg, Man.

Notice to Contractors

Wallace Avenue Bridge-Superstructure a Stairways

Tenders will be received by registered post only, addressed to the Chairman of the Board of Control, City Hall, Toronto, Ontario, up to noon on TUESDAY, OCTOBER 16TH, 1906, for the superstructure and stairways of Wallace avenue bridge erected in place.

Envelopes containing tenders must be plainly marked on the outside as to contents.

Drawings may be seen and specifications and forms of tender obtained at the office of the City Engineer, Toronto, upon application.

The usual conditions relating to tendering as prescribed by city by-law must be strictly complied with.

The lowest or any tender not necessarily accepted.

EMERSON COATSWORTH, Mayor,
Chairman Board of Control.

City Hall, Toronto, September 28th, 1906.

CONTRACTS OPEN.

EGLINTON, ONT. — The Public school building is to have an addition made to it this fall.

PARIS, ONT.—The Board of Education are discussing the proposed new North ward school.

PORT COLBORNE, ONT. — B. Parker is considering the erection of a new factory building.

CARILLON, QUE. — The Ottawa River Navigation Co., intend building a large hotel at this place.

PORT ARTHUR, ONT.—The C. N. R. have decided to make extensive improvements to their docks.

LEAMINGTON, ONT.—By-law to loan $30,000 to an automobile factory to locate here has been defeated.

MOOSE JAW, SASK.—P. A. Carleton, of Lowell, Mass., is considering the establishment of a tannery here.

WESTVILLE, N. S.— The Sutherland Rifle Sight Co., Ltd., intend erecting a new factory, cost $20,000.

CARON, SASK. — W. Lowry, of Westboro, Ont., has purchased a site on Main street for a store building.

LASHBURN, SASK.—W. L. Barrie has taken tenders for the erection of a schoolhouse Tp. 45, Rge. 26, W 3 M.

SARNIA, ONT.—The Empire Salt Co. have decided to erect a new salt mill in connection with their present plant.

SYDNEY MINES, N. S.—Estimates have been submitted to the Town Council for a sewerage system, cost $9,697.

THAMESVILLE, ONT.—A by-law to raise $4,000 to build a new town hall for Orford township has been defeated.

SUDBURY, ONT.—A petition from the ratepayers will be presented to the Government for a new post office building.

BELLINGHAM, ONT. — H. R. Fullerton has taken tenders for erection of a schoolhouse in Parkinson township.

STURGEON FALLS, ONT. — The Salvation Army have purchased a lot on Front street on which to erect a barracks.

QU'APPELLE, SASK.—The members of the Roman Catholic congregation are considering the erection of a new church here.

WESTMOUNT, QUE.—The Royal Bank will erect a branch bank building, corner of Sherbrooke street and Victoria ave., cost $25,000.

BURNABY, ONT.—John Hill, Reeve, will receive tenders up to October 6th for excavating on sections 1, 2, 3, 4, 6 and 7 of Braun ditch extension.

BATTLEFORD, SASK. — R. C. Laurie will receive tenders up to October 15th for the purchase of $2,000 town debentures.

HIGH RIVER, ALTA.—W. E. G. Holmes is this week receiving tenders for the purchase of $5,000, 5 per cent. debentures.

MOOSOMIN, SASK.—By-laws have been carried to raise $32,000 for waterworks and drainage and $5,000 for the town hall.

MONTMORENCY, QUE. — The Dominion Textile Co. have decided to erect a large building in connection with their mills here.

SHERBROOKE, QUE.—The plans for the new Sacred Heart Hospital have been accepted and the work of construction will soon begin.

BRANDON, MAN.—W. Walker has taken tenders for the erection of the new building for the Collegiate Institute. W. A. Elliott, architect.

BOUCK'S HILL, ONT.—Geo. Lane, township clerk, will receive tenders up to October 10th for purchase of $4,651.89 4½ per cent. debentures.

OAKVILLE, ONT.—Preparations for the installation of the waterworks and sewer system here are being carried forward by the Town Council.

WESTBOROUGH, ONT. — A. G. Dawson will receive tenders up to October 17th for the purchase of $8,022.-20 public school debentures.

NORTH TORONTO, ONT.—It is reported that the Stark Telephone Light & Power Co., are considering the establishment of a sub-station here.

PAISLEY, ONT.—The Town Council gives notice of its intention to construct granolithic sidewalks on Alma, George, Queen, Mill and Victoria streets.

FERGUS, ONT.—A by-law will be voted on October 11th to loan $7,164.90 to G. T. R., to aid in constructing a branch to James Gow's stone quarry.

SELKIRK, MAN.—The Town Council gives notice of its intention to construct sewer on Superior avenue from Sophia to Eveline street, cost $4,174.

OAK RIVER, MAN.—E. G. Brassey will receive tenders up to October 5th for installing a heating and ventilating system in the new public school building.

NORTH BAY, ONT.—Tenders will be received at the Department of Public Works, Toronto, up to October 13th for erection of the new Normal school building.

ST. GEORGE, N. B.—The Public Works Department are considering the erection of a new bridge to replace the one which spans the Magaguadavic river.

ST. CATHARINES, ONT. — D. O'Conner and W. A. Maus, of Peterboro, have been looking for a site here on which to locate a roller steel plate factory.

CHATHAM, ONT.—A. M. Piper, architect, will receive tenders up to October 4th for various trades required for erection of an addition to the General Hospital.

SUMAS, B. C.—The ratepayers have decided in favor of the construction of the dyke from Sumas mountain to Chilliwack mountain for reclamation of the lake bottom.

HASTINGS, ONT.—A by-law has been carried to give a bonus of $5,000 and ten years exemption from taxation to the Peterboro Boiler & Radiator Co. to locate here.

LONDON, ONT. — The following building permits were issued: E. Fairbairn addition to residence on Picadilly street; L. J. O'Dell, brick residence, Elias street.

HEADINGLY, MAN. — Thomas Buchanan will receive tenders up to October 5th for erection of a four-roomed frame school house. Plans with F. R. Evans, architect, Winnipeg.

WATERLOO, QUE.—R. F. Shaw will receive tenders up to October 31st for construction and supply of material for a new Academy building. Plans with Hutchison & Wood, architects, Montreal.

HAMILTON, ONT.— The Sewers Committee recommend the expenditure of $13,000 on grading the mountain drain and putting in cement walls.—The Canadian Bearings Limited intend building a large factory here.

WELLAND, ONT.—H. A. Rose is preparing to erect a large residence building on North Main street. T. L. Nichols, architect.—The same architect is preparing plans for additions to the store building of Goodwin & Ross.

CALGARY, ALTA.—Gordon McKay & Co., Toronto, have been looking for a site on which to establish a branch of their wholesale drygoods business.—The Alberta Biscuit Co. intend establishing a plant here, cost $35,000.

HOPEWELL CAPE, N. B.—C. H. LaBillois, Department of Public Works, Fredericton, will receive tenders up to October 22nd for building Mill Creek Mouth bridge. Plans at the Department, with Postmaster here, with James Ryan, Moncton, and Leonard Martin, Alma.

ARCOLA, SASK.—J. S. Bush will receive tenders up to December 1st for the purchase of $30,000 waterworks debentures and $5,000 town hall debentures, interest at 5½ per cent.—J. McEwen has purchased a site, corner Prairie avenue and Manor street for a residence.

VICTORIA, B.C.—W. J. Dowler will receive tenders up to October 22nd for the purchase of $10,726,32 local improvement debentures. — A by law will be voted on October 4th to raise $200,000 for water works.—A. M. Muir, architect, has taken tenders for erection of a brick business building.

OWEN SOUND, ONT.—F. Gelinas, Department of Public Works, Ottawa, will receive tenders up to October 27th for construction of a pile and concrete revertment wall here. Plans at the Department, with Postmaster here, and at office of J. G. Sing, Resident Engineer, Confederatien Life Building, Toronto.

GODERICH, ONT. — F. Gelinas, Department of Public Works, Ottawa, wil receive tenders up to October 20th for the completion of breakwater here. Plans with J. G. Sing, resident engineer, Confederation Life Building, Toronto; H. J. Lamb, London; at the Department and with the Postmaster of this place.

PETERBORO, ONT.—A new set of plans for the Collegiate Institute building have been prepared by John Belcher, architect, cost $61,000.—The plans for the new Normal school building have been completed and tenders for its construction will be received up to October 13th at the Department of Public Works, Toronto.

STRATFORD, ONT.—William Lawrence, City Treasurer, will receive tenders up to October 4th for the purchase of the following debentures: $64,588, 15 year; $48,976, 20 year and $18,000, 30 year.—H. F. McNaughten, Department of Public Works, Toronto, will receive tenders up to October 13th for the erection of the new Normal school building here.

EDMONTON, ALTA.—K. A. McLeod is preparing for the erection of an opera house, corner McDougall and Rice streets.—The plans of H. Magoon, architect, for the new Y. M. C. A. building have been accepted and tenders for its construction will soon be called.—J. A. O'Connor is considering the erection of a new theatre, corner Jasper and Third streets.—T. H. Watson will erect a residence on River street, cost $1,800.

OTTAWA, ONT.—Plans for the new wing of the Parliament buildings are nearing completion, and tenders for its construction will soon be called.—The owners of the Gilmour Hotel, which was recently destroyed by fire, are planning to rebuild it on a larger scale.—N. J. Ker, City Engineer, will receive tenders up to October 10th for supply of sleighs for the scavenger carts.—The new Bank of Ottawa building, corner Bank and Gloucester streets, will soon be begun, three-story building, 35 x 72 feet, classic style. Northwood & Noffke, architects.

MONTREAL, QUE. — The First Baptist church have decided to purchase property corner of Sherbrooke street and Union avenue for the location of their new church, on which work will soon begin.—The Bank of Montreal are planning to build a new branch up town for the use of ladies.—The Drainage Canal Co. will seek incorporation to construct a canal or system of canals from the Richilieu river to the Montreal river.—The Water Committee have been given permission to appoint a commission to report on a pure water supply for the city.—L. O. David, City Clerk, will receive tenders up to October 9th for a centrifugal electric sewage pump.—The new jail will probably be located at Black river, for which plans will soon be prepared.

WINNIPEG, MAN.—D. R. Dingwall has purchased a site, corner Portage avenue and Carlton streets on which he will erect a block.—John McRae has sold property on Stanley street on which it is expected a large warehouse will be erected. — The School Board are considering the erection of a new Collegiate Institute building.—The congregation of St. John's Methodist church intend enlarging their building.—J. H. G. Russell, architect, has taken tenders for the erection of a brick addition to the Children's Home on River avenue, also for a brick addition to the Children's Aid Shelter on Mayfair avenue. — The Canada Flour Exporting Co., is being formed and intend erecting a warehouse in this city.—The City Council gives notice of its intention to construct asphalt pavements with sewer connections on Selkirk avenue from Andrews to Sinclair street, cost $55,155 and on Sargent avenue from

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MONTREAL

Maryland to Arlington street, cost $38,-551.45.

VANCOUVER, B.C.—The Salvation Army have purchased the old Windsor Hotel property, corner Gore avenue and Hastings street which will be enlarged and remodelled for their use. They have also purchased a lot, corner Eighth avenue and Birch street and the building thereon will be remodelled for a Rescue Home.—The Trustee Board of Wesley Methodist church have purchased a site, corner Haro and Bute streets for a parsonage.—The Bank of Montreal contemplate enlarging their present premises at an early date.—The Hall Elevator & Grain Co., will begin the erection of a flour mill this fall.— Plans have been prepared for a three-story block on Cordova street for the Thompson Stationery Co., cost $15,000. — Building permits have been granted as follows: Addition to Kings Hotel; Carrall street cost $5,-000; J. C. Hawkins, residence on Victoria drive, cost $2,000; new Isolation hospital and other buildings for General hospital; Twelfth avenue, cost $30,000; A. M. Sharpe, residence, Thurlow street, cost $1,500; C. F. Perry, three residences, Columbia street, cost $6,000; T. Bayley, residence Eaton street, cost $1,000; G. R. Carson, residence, Eighth avenue, cost $1,700.

TORONTO, ONT.—The Board of Control will receive tenders up to November 6th for building the Lansdowne avenue subway substructure. Specifications at office of City Engineer.—Tenders are invited at 233 McCaul street for all trades and material for four solid brick houses.—Tenders are wanted for brick and stone work on a pair of houses, apply corner of Albany and Barton avenue.—The W. C. T. U. intend replacing the Girls' Home on Elm street by a larger building.—H. L. Hime & Co., real estate dealers, have sold property on Spadina crescent where four houses will be erected.—The Board of Directors of Toronto University, have decided on a site, corner Hoskin avenue and Devonshire place for the men's residence.—The Polson Iron Works are contemplating building an extension to their works at foot of Frederic street.—Plans have been prepared for a new Horticultural building at the Exhibition grounds, cost $70,000.—F. W. Stair, Manager of the Star theatre, has purchased property on Temperance street adjoining that building on which an addition will be built. Building corner of Queen and Bond will not be proceeded with.—The Kindel Bed & Mattress Co. have secured property on Sherbourne street below King on which they will erect a large factory.—The Board of Control favor changing South Parkdale station from its present site to Sunnyside and will confer with the G. T. R. on the matter.—A four story brick building for women of the Belmont Home will be erected on Belmont street, cost $45,000.—City Engineer Rust has recommended the following asphalt pavements:—Wellington street, from Bay to York, $6,005; Halton street, from Dundas to Shaw, $3,754; St. Vincent, from Grenville to St. Joseph, $9,292; Ontario street, from Carlton to Howard, $13,470; St. George street from College to Bloor, $18,136; Jordon street, from King to Wellington, $2,158.—H. F. McNaughton, Department of Public Works, Parliament Buildings, will receive tenders up to October 13th for the erection of Normal school buildings at Peterboro, Stratford and North Bay.—The Board of control will receive tenders up to October 16th for construction of superstructure and stairways of Wallace avenue bridge. Plans with City Engineer.— Tenders will be received at the same office up to October 16th for laying and jointing of pipes, valves, hydrants and special castings for high pressure fire service.—An application will be made to the Government for permission to issue debentures for the new Yonge street bridge. — Clarke & Clark are preparing to erect a new tannery on Carlaw avenue, cost $75,000.—Building permits have been issued as follows: B. H. Morehouse, 2-story brick veneer dwelling, Hamilton street, near Gerrard, cost $1,500; Dr. D. K. Smith, 2-story and attic brick dwelling, Wellesley street, near Yonge, cost $8,000; J. J. Downey, pair 2-story brick dwellings, Lynd avenue, cost $4,000; E. M. Crocker, 2-story roughcast dwelling, Munro street, cost $1,500; Mrs. E. Tamblyn, 2-story frame dwelling, Kenilworth avenue, cost $2,500; E. Broome, 2-story brick dwelling, Prince Arthur avenue, cost $6,500, A. S. Ault, 2-story brick dwelling, corner Bedford road and Prince Arthur avenue, cost $8,500; J. J. Walsh, pair 2½-story brick dwellings, 89-91 Beatty avenue, cost $7,000; S. Prest, four 2-story brick dwellings Sinclair avenue, cost $8,400; H. S. Mara, five 2-story brick dwellings, Marlborough avenue, cost $10,000; Andrew Hamilton, 1-story and attic brick dwelling, 488 St. Clarens avenue, cost $1,800; E. Taylor, 2-story and attic brick dwelling, Leuty avenue, near Lee, cost $3,000; W. H. Marks, pair 2-story brick dwellings, Margueretta street, near Wallace avenue, cost $4,000; Edward Wheler, 2-story and attic brick dwelling, 277 Crawford street, cost $3,500; Samuel Trees Co., 4-story brick warehouse, 42 Wellington street east, cost $6,000; King Bros., three 2-story roughcast dwellings, brick fronts, Hamburg avenue, near Bloor street, cost $5,000; Gray & Son, three 2-story brick dwellings, College street, near Sorauren avenue, cost $5,500; G. Skeefington, 2-story roughcast dwelling, 550 Clinton street, $1,500; Wilton C. Eddis, 5-story and attic brick dwelling, Binscarth road, cost $7,500; Evangelia Settlement, 2-story brick club, corner Queen and River streets, cost $13,000; W. J. Adare, three 2-story brick and roughcast dwellings, Thorne street, cost $3,500; Gray & Son, three 2-story brick dwellings, Geoffrey street, cost $5,500; A. Blackwell, pair 2-story and attic brick and roughcast stores and dwellings, corner St. Clarens avenue and Lappin street, cost $2,800; Miller Cartage Co., nine 2½-story dwellings, Dupont street, cost $14,000; J. Turner, 2-story brick veneer store and dwelling, Danforth avenue, near Logan, cost $2,000; Aged Women's Home, 3½-story brick building, Belmont street, cost $50,000; H. J. & E. R. Reynolds, four 2½-story brick dwellings, Dundonald street, cost $18,000; W. D. Hutson, 2-story brick and roughcast dwelling, corner Symmington avenue and Paton road, cost $2.000; G. G. Pearce, pair 2½-story brick dwellings, Geoffrey street, cost $5,000.

CONTRACTS AWARDED.

NELSON, B. C.—Erection of foundry building: Mr. Burns, contractor.

STRATHCONA, ALTA.—$15,000 debentures: National Trust Co., purchasers.

MAIDSTONE, SASK. — Erection of new school building: U. Payne, contractor.

MIDALE, ONT.—New residence for W. J. McKay: Mackenzie & Provost, contractors.

REGINA, SASK.—$180,000 4½ per cent. debentures: Nay, Anderson & Co., purchasers.

ALMONTE, ONT.—New building for the Bank of Montreal: Mr. Byers, Montreal, contractor.

PETERBORO, ONT.—$14,000 4 per cent. debentures: Wood, Gundy & Co., purchasers, Toronto.

ORANGEVILLE, ONT. — Constructing new Carnegie Library building: Jas. Jerrett & Son, Alliston, contractors.

PORT ARTHUR, ONT. — Heating system in Presbyterian church: James Smart Manufacturing Co., contractors.

MERRICKVILLE, ONT. — Heating system in public school building: James Smart Manufacturing Co., contractors.

PHOENIX, B. C.—Erection of new Post Office and Custom House: James Thompson, contractor, cost about $3,500.

BIRCH HILLS, SASK.—Erection of Presbyterian church: A. E. Wilson.—Erection of Methodist church: James Walch, contractor.

ST. MARTINE, QUE.—The James Smart Manufacturing Co., Brockville, Ont., have secured the contract for heating system of the new town hall.

APPLEBY, ONT.—Installation of Kelsey system of warming and ventilating of Methodist church: James Smart Manufacturing Co., Brockville, contractors.

BARRIE, ONT.—Construction of steel bridge with concrete abutments between Simcoe and Dufferin counties: Jenks & Dresser, Sarnia, contractors, cost $2,525.

MONTREAL, QUE.—New building on Alexander street for the Southam Co.: Hennibique Construction Co., of New York, contractors. D.K. Brown, architect.

WINNIPEG, MAN.—Clearing right-of-way for G.N.R. into the city: Neil & Moody, contractors.—Building of septic tank at new quarantine hospital: Dobson & Jackson, contractors, cost $1,325.

GRAVENHURST, ONT.—New public works construction: Electrical apparatus, Allis-Chalmers-Bullock, $8,850; water wheels, Jenckes Machine Co., $3,204; steel flume, Canada Foundry Co., $6,600.

VANCOUVER, B. C.—Moore & Whittington, contractors have been awarded contracts to build a 10-roomed house for Mrs. Hartnell, Yates street; a residence for Mr. Mathieson, Oak Bay avenue, and a country residence for Mr. G. McGregor, on Quadra street.

TORONTO, ONT. — The Board of Control has awarded the following contracts for the new freight warehouse to be located on the west side of block "D," Harbour square: Piling, John E. Russell, $3,003.10; concrete piers, Peter Arnot, $525; carpenter work, George Henry, $17,984; slating and galvanized iron, G. M. Bryan, $3,408; plumbing, Fred Armstrong, $251; painting and glazing, F. E. Phillips, $775; total, $25,946.10.

FIRES.

Timins Bros'., Bolton Bros'., business places and other building, Almonte, Ont., loss $125,000.—Warehouse, etc. of the Canadian Oil Co., Strachan avenue, Toronto, damaged to extent of $100,000.—City Photo Studio, Peterboro, loss $30,000.—W. J. Burleigh's livery stable, S. Yoeman's livery stable and other property, Port Colborne, Ont., loss $12,000.—D. Beauvais, bakery and other buildings, at St. Cesaire, Que., loss $5,-000.—Cornwall House, Bank of Ottawa and other buildings, Carp, Ont., loss $6,-000.—Presbyterian manse, Omemee, Ont, damage $1,500.—Wood-working factory and ware rooms of E. J. Silliker & Co., Amherst, N.S., totally destroyed, loss $40,000.—Severn Hotel, W. H. Miller and J. H. Jackson's stores and other buildings at Severn, Ont., loss $22,500.—Eclipse Cheese factory near Foxborough, Ont., totally destroyed.—J. B. Tardiff's foundry, Plessisville, loss $15,000.—Eight houses at St. Louis de Mile End, Que., loss $100,000.—Centenary Methodist church sunday school building St. John, N. B., damage $20,000.—Strathcona Hotel, Emerson, Man., loss $30,-000.—Boyce's carriage warehouse, Rose avenue, Winnipeg, damage $28,000.—Residence of Mrs. F. Simpson, Edrans, Man., completely destroyed.—Residence of Joseph Tern, Water street, St. Mary's, loss $3,000.

SPLINTERED TIMBER PILES.

During the formation of the foundations for the Naval Engineering Building at the Massachusetts Institute of Technology, some three hundred timber piles were driven. The piles were of spruce, and measured 28 ft. long by 6 in. diameter at the point and from 9 in. to 12 in. at the top, and were driven to refusal by a 2,500-lb. monkey falling from the height of 15 ft. No difficulty was experienced in driving the piles, and no evidence was presented suggesting injury until after the building had been erected. Then excavations revealed the fact that several of the piles were seriously splintered and crippled, some of them being literally split up into matchwood. Although the case here mentioned is probably of unusual character, it may easily recur in soil containing boulders a short distance below the surface. The fact that no indication of injury is likely to be given is one that does not tend to increase confidence in timber piling, and distinctly suggests the advisability of adopting reinforced concrete piles sunk in such manner as to avoid any risk of damage.

LIFE OF WATER PIPES PROLONGED.

A paper insulation for cold water pipes has been found to greatly prolong the life of the pipes in many instances. Where the temperature of the water flowing through the pipes is comparatively low, a condensation is caused by the warm air coming in contact with the metal.

In some instances water collecting constantly at the same point is the cause of a weakning at this spot, and the pipe is found to be useless after a rather short career of use

This collection of moisture has been frequently laid to leakage, but the remedy is found in a newly devised water pipe which has a covering of some material, either paper or asbestos. Paper answers all purposes, but asbestos is more durable.

Mr. Willis Chipman C.E., Torronto, has been engaged by the town of Portage la Prairie, Man., to make investigation as to the water possibilities of the Assiniboine river, and for some days he has been at work in it. Mr. Chipman a short time ago went up the river some distance and made investigations.

A Reinforced-Concrete Conduit, with an interior diameter of 12.5 ft. and operating under a water pressure of 92 ft., has been placed in service in an irrigation system in the Province of Huesca, Spain. The conduit is 3,330 ft. long and is in duplicate. The two pipes are estimated to supply nearly 10,000 gallons of water a second to a canal that will furnish water to irrigate 261,820 acres. They are built as inverted syphons across two valleys in lieu of an elevated aqueduct.

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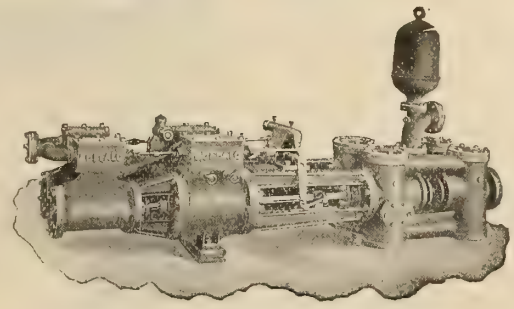
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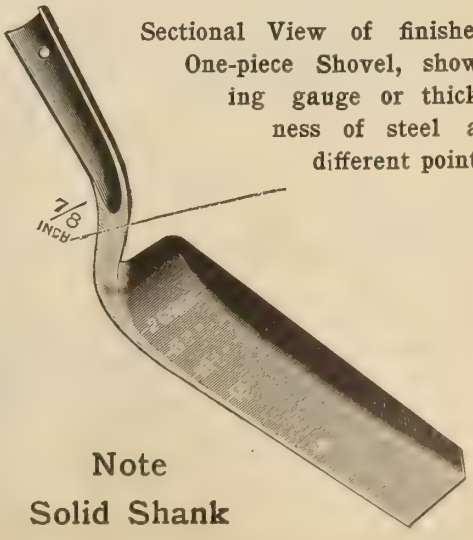

Sectional View of finished One-piece Shovel, showing gauge or thickness of steel at different points
Note Solid Shank

TEST OF CONCRETE.

A large warehouse for a hardware concern in the city of St. Paul, Minn., is being erected of reinforced concrete, and with a view to determining the merits of the work a test on a floor section about 6½ feet wide by 16 feet long was recently made. The initial test was of 43 tons of pig iron after the section had been in about 90 days, says Construction News. Four days later the load was increased to 78 tons, amounting to a dead weight of 1,500 pounds pressure to the square foot. The building is to carry a stock of hardware, and is designed to carry a weight of 500 pounds per square foot on the lower floors and 300 pounds on the upper floors. This test is on one of the lower floors and is therefore a load of three times the weight which it is designed to carry.

The deflection under the heaviest weight was practically imperceptible. Two stakes, nailed securely and set firmly in the centre of the loaded section, were marked squarely across with a pencil. The deflection was not the width of a black pencil mark.

ARCHITECTS' COMPETITION.

All Canadian architects, according to the decision of the government, will be permitted to compete with plans for the new departmental block to be erected on Sussex street and Mackenzie avenue, Ottawa. Fifteen thousand dollars will be given in four prizes of eight, four, two and one thousand dollars. The competition will close on February 15, 1907, when the plans must be in the hands of the Minister of Public Works.

The board of assessors to decide upon the merits of the various sets of plans will be composed of Edmund Burke, president of the Architects' Association of Ontario; Mr. Chausse, president of the Quebec Architects' Association, and David Ewart, chief architect of the Department of Public Works.

The arrangements are that each competitor submits his name and design to the minister in a sealed envelope, the department providing him with a copy of the conditions and details as to the site. The board of assessors will know the competitors only by numbers, which are to be placed upon the designs before they leave the custody of the minister.

It is intended to have two buildings of five stories each, to be fireproof, with an interior construction of steel and cement. One of these buildings will house the Department of Justice, Railway Commission, Supreme and Exchequer Courts, and will be provided with a free library. It has not been decided as to who will occupy the other building.

The plans must contain details in relation to the position of the buildings upon the sites, the laying out of the roads and avenues and the connecting of Parliament Hill with Major's Hill Park by an ornamental bridge over the Rideau canal. The buildings are to have a floor space of 225,000 feet, which is 12,000 feet more than is contained in the eastern, western and Langevin blocks. The space provided at present in buildings rented by the government is 186,131 superficial feet.

The new structures are to be fireproof in character, the materials composing the interior to be of steel and cement. The competitive designs will be limited to sketches in ink, and no brush work will be allowed except for finishing the windows in sections. The number of square feet in each room, the lineal dimensions and other particulars must be shown. The drawings are to be without shade or color and contain plans of separate floors and elevations.

CONCRETE MACHINERY.

The Ideal Concrete Machinery Company, of South Bend, Ind., are now manufacturing their "Ideal" cement block machines in Canada, the factory and office being situated at 124 York street, London, Ont. This company had an exhibit at the recent Toronto Exhibition, as a result of which a large number of orders were booked. The Canadian office is in charge of Mr. F. M. Leach.

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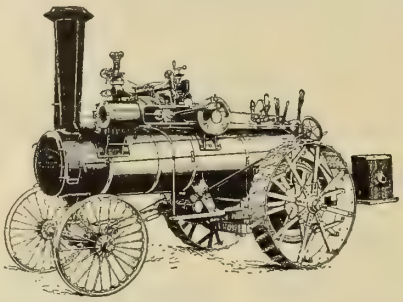

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Regina	21,215 sq. yds.	St. Catharines	4,600 sq. yds.
St. Boniface	18,272 sq. yds.	Total	129,161 sq. yds.

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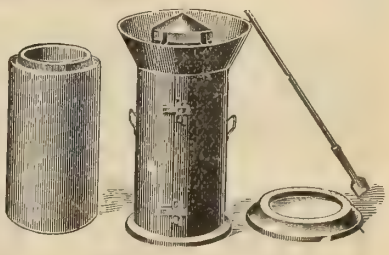

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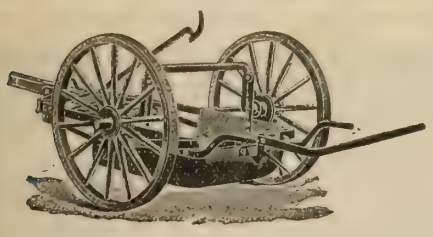

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THE WEIGHT OF ASHES, GARBAGE, ETC., WITH OTHER DATA.

In the transactions of the American Society of Civil Engineers for April there is a valuable paper by Mr. H. de B. Parsons, entitled "Disposal of Municipal Refuse, and Rubbish Incineration." From that paper we have abstracted data that may be of use to our readers.

Mr. Parsons gives the following as average weights per cubic yard.

	Lbs. per cu. yd.
Rubbish (paper, rags, old furniture, etc.)	200
Street sweepings	850
Garbage	1,150
Ashes	1,350

The weight of ashes varies from 1,200 lbs. to 1,500 lbs. per cubic yard. Ordinary household ashes contain about 15 per cent. of unburned coal; but steam-ash averages about 24 per cent. to 30 per cent. coal, the lower figure being for bituminous, and the higher figure for anthracite coal.

Mr. Parsons states that the mixed ash collections from New York City contain 30 per cent. to 35 per cent. combustible matter.

Rubbish, as ordinarily piled in carts, or without extra packing, weighs 130 lbs. to 225 lbs. per cubic yard. In Boston it average 202 lbs. per cubic yard; in New York it averages about 140 lbs.

The weight of street sweepings from 800 lbs. to 1,400 lbs. per cu. yd. depending upon the dryness of the weather and the time of collection.

A large table is given by Mr. Parsons showing the average per capita weight of city refuse collected in different cities. From that table the following was deduced, showing the average collection of refuse per capita per day:

	Lbs. per day
Garbage	0.53
Street sweepings	0.50
Ashes	2.23
Rubbish	0.21
Total per capita	3.47

Mr. Parsons gives diagrams showing the variations in the amount of refuse collected during different months of the year, and data showing the fuel value of city refuse. He describes and illustrates the rubbish incinerator designed by him for the city of New York, and gives data showing the economy that it effected. To those interested in city refuse incineration, this paper by Mr. H. de B. Parsons is the most valuable that has ever been printed in this country.

Mr. C. H. Clark, contractor, Gananoque, Ont., died at his home last week, after a prolonged illness.

Mr. Francois Desrochers has been appointed engineer of the new waterworks, at Levis, Que.

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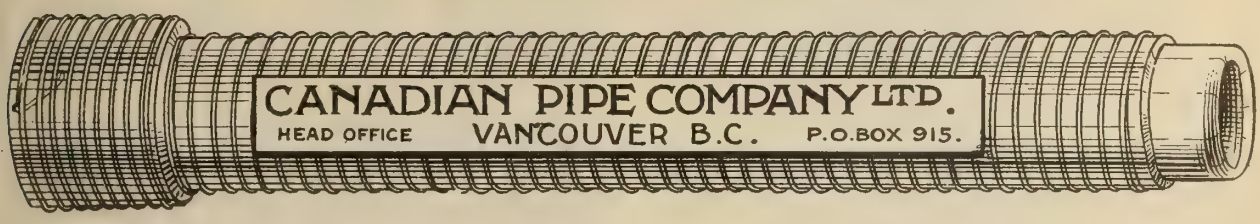

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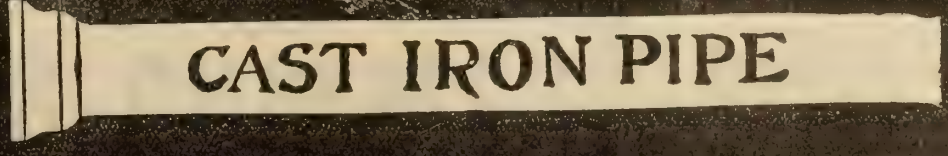

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Westmount Refuse Destructor and Lighting Plant

The town of Westmount, just outside of Montreal, has been furnishing lately some valuable data on the results obtained from its combined refuse destructor and electric lighting plant. The problem of burning garbage to advantage in Canada has long been regarded as impossible, owing to the wet nature of the material.

The Westmount destructor has proved in actual practise that it is possible not only to burn the garbage, winter and summer, but to use the heat generated by such burning for the partial running of electric light generating units.

An official test made early in May on a run of 8 hrs. 32 mins. resulted in the burning of 37,550 pounds of mixed garbage, with an evaporation of 41,991 pounds of water, giving a rate of 1.12 pounds of water to 1 pound of refuse under working conditions, or 1.36 pounds of refuse to 1 pound of water from and at 212 degrees Fahr. The idea of building a destructor for its present combined purpose originated with Mr. F. L. Fellowes, town engineer of Westmount. Messrs. Ross & Holgate, consulting engineers, of Montreal,

FIG. 1.—VIEW OF WESTMOUNT DESTRUCTOR AND ELECTRIC LIGHT PLANT.

The lighting plant is seen in the foreground and the refuse destructor house in the rear with the 150 foot chimney. The refuse is hauled to the top of the destructor house on the upper level. This picture shows how the engineers took advantage of the deep gulley to use the forced gravity in the process of garbage destruction.

supervised the erection of the plant on the Cost-Plus-a Fixed-Sum-Basis and worked out its details. Construction was begun last October and by April 1st the buildings, destructor and 150 foot chimney were in working order. From 1900 to 1903 inclusive the town of Westmount employed for refuse collecting, five horses and carts, five drivers and two stable men. During 1904 they collected about 6,500 loads. The annual cost was $4,035.39.

In making his estimates for the present plant Mr. Fellowes provided for a brick and steel building, with charging platform of concrete and steel, stoking floor of concrete, a refuse tipping platform, house of wood encased with sheet iron and a twenty long-ton garbage hopper. In arriving at the capital cost and charges the electric lighting plant was charged with one-half the cost of the destructor, house and boiler. It was calculated that in one year the destructor would consume refuse equal to 1,042 long tons of coal and therefore 1,000 tons of coal at $4.00 a ton were credited to

FIG. 2.—FRONT VIEW OF WESTMOUNT REFUSE DESTRUCTOR.

This picture shows the three destructor grates with the doors lifted to give a view of the fire within. The refuse is dropped into the grates from the hopper which discharges in top of the destructor.

the operation of the destructor. Mr. Fellowes' second preliminary estimate follows:—

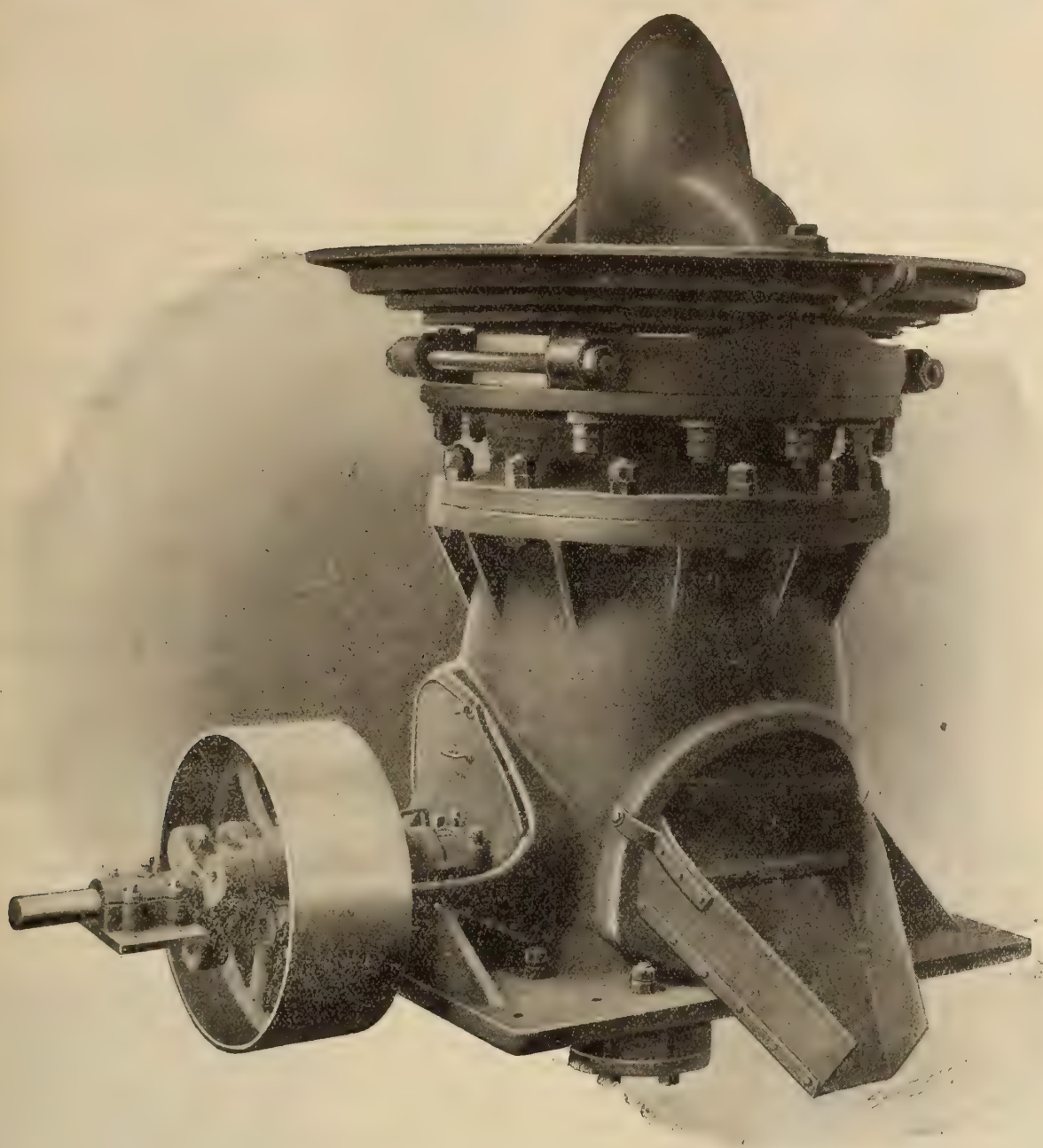
		Interest 4	Depreciation 5%	Repairs
Land	$13,660	$ 546.40	$ 950.00	$285.00
Incinerator	19,000	760.00		
Foundations	3,000	120.00		
Buildings	3,500	140.00	175.00	52.50
Ry. switch, scales, bldgs, etc.	16,408	656.32	820.40	246.12
	$55,568	$2,222.72	$1,945.40	$583.62

Operating Expenses.		Credit 1,000 tons of coal.	
Interest	$2,222.72	By sale of H. P. energy to lighting at $4.00 per ton	$4,000.00
Depreciation	1,945.40		
Repairs	583.62		
Two laborers	939.00	By clinker sold to road and walks	250.00
One stoker	730.00		
One cart and horse	637.00	Credit	$4,250.00
	$7,057.74	Tons destroyed per year	6,476
Credit	4,250.00	Total operating expenses	$2,807.74
	$2,807.74	Cost per ton	43.3 cts.

The cost of cartage and collection under the old system averaged 62.3 cents a ton, while under the new system the cost is reduced to 52.4 cents a ton, by the elimination of one horse and cart; the cost of destruction, 43.3 cents a ton added to cost of garbage collection gives 95.7 cents as the total cost per ton.

Messrs. Ross & Holgate in giving estimates for the electric lighting plant submitted the following fig-

GATES "K" BREAKER



Gates Style "K" Gyratory Breaker has greater capacity and consumes less power per ton of rock broken than any other breaker ever built. See Bulletin 1916.

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ures:—Population of town, 11,000; number of houses, 2,000; arc lamps for streets, 150; plant to accommodate 2,000 houses. They estimated the capital outlay including 10% for contingencies at $129,884 for the electric lighting plant, and $67,175 for the refuse and power plants, giving a total of $197,058. It is extremely probable that the actual amount finally expended will fall considerably short of this figure.

The accompanying illustrations show the exterior view of the combined plant and the front view of the destructor proper with stoking and ash pit doors and trap doors for clinker. The buildings are situated in a hollow and great ingenuity was shown by the engineers in taking advantage of the lay of the land in order to utilize the force of gravity throughout the process of garbage destruction. The carts haul the refuse to the tipping platform far above the level of the grates into which it is dropped from the hoppers. The clinker is removed by wagons from the lower level. The refuse hopper which discharges into openings on top of the destructor, as seen in figure 2, is made of steel with lifting doors at its base close to the feed holes in the destructor. In the rear of the destructors are doors to enable the feeders to push the refuse in to the hottest portion of the fire without keeping the front doors unnecessarily open. The waste gasses from the burning refuse after firing the boiler pass through a series of staggered cast iron pipes about which air drawn from the room is kept circulating; after being heated by passing about these tubes the incoming air is carried through brick ducts to steam-jet blowers under the grates of the incinerator where the heated air (of a temperature of between 300 and 400 degrees Fahr.) is forced through the grate bars by the blowers.

The second function of the plant, that of supplying electricity to the town, is cleverly worked out in conjunction with the incinerating. In addition to the gas-fired boiler there are two others fired by hand with coal, this being necessary because of the insufficient supply of refuse. The steam from all these boilers feeds a common main which passes from the boiler house to the lighting station across a fifteen foot roadway. The generating units consist of three vertical cross-compound condensing high speed engines made by the Robb Engineering Company, of Amherst, Nova Scotia, directly coupled to 2,300-volt, 60-cycle three-phase alternators of Crocker-Wheeler make. Two of these units have a full load capacity of 200 kilowatts with an overload rating of fifty per cent. the third being a 50 kilowatt unit of similar characteristics. Provision has been made for the installation in the same building of a fourth unit which will double the capacity of the plant, the present equipment of boilers being sufficient to handle the additional unit.

The station is now furnishing electric light to private citizens of Westmount. When it is in full running order the plant will furnish all the light required for both municipal and private use in the town. The price will be lowered as the number of customers increases and it is expected that the rate per kilowatt hour will eventually be eight cents.

The following is the report made by Messrs, Ross & Holgate on the test referred to earlier in this article:

REPORT OF TEST OF MUNICIPAL REFUSE DESTRUCTOR, WESTMOUNT, P. Q., MAY 3RD, 1906.

W. L. Lee, Esq., Chairman Light Committee, Westmount:

DEAR SIR: Since April 14th, 1906, the refuse destructor built by Messrs. Meldrum Bros., in connection with your municipal lighting plant, has been successfully destroying all refuse brought to it, in quantities averaging about 30 loads per day, the average weight of a load being about 1,500 pounds. This has usually been burned in 10 to 12 hours, giving an average burning capacity to the destructor of about 4,500 lbs. per hour, or a little over two tons. During several days this amount has been exceeded, and we have therefore no hesitation in saying that the maker's guarantees of 50 tons per 24 hours can be attained with proper firing. In order to officially test the plant, however, on May 3rd, a staff of our engineers went to Westmount, and conducted a special test run as follows:—

OBJECT OF TEST:—The test was conducted to try the burning and evaporative powers of the Meldrum Bros., three-grate refuse destructor when fired with unscreened mixed refuse, and connected to a Babcock & Wilcox boiler of 2,197 square feet of heating surface, and also to test the maker's guarantees regarding completeness of combustion, quality of residual clinker, temperatures in various parts of the destructor, etc., etc.

APPARATUS USED:—The following apparatus and instruments were made use of:

1. Meldrum destructor with regenerator, steam jet blowers, etc.
2. B. & W. water tube boiler, of 2,197 square feet heating surface, and with superheater and the necessary pipes to engine, atmosphere, etc.
3. Orsat apparatus for analyzing flue gasses.
4. U-tube gages for ash-pit pressures and chimney pull.
5. Dial thermometers for gas temperatures entering and leaving regenerator.
6. Stem thermometers for hot air, cold air, and feed water temperatures, etc.
7. Aneroid barometer for atmospheric pressure.
8. Public standard scales for weighing refuse, clinker, tins, etc., and also for calibrating the barrels used for measuring the feed water.
9. Knowles 6 x 4 x 6 duplex pump for feeding boiler, equipped with Williams Gage Co.'s automatic feed regulator.
10. Watkins heat recorders for combustion chamber temperatures.

DURATION OF TEST:—The test proper commenced at 10 a. m. and ended at 6.32 p. m, or continued for 8 hours 32 minutes.

CONDITIONS OF OPERATIONS:—Weather: Wednesday, May 2nd, was raining all day and all night. Thursday, May 3rd was raining in morning until 11.30, when rain stopped and wind got up. Afternoon was warm and sunny.

APPARATUS:—The destructor gases fired the B. & W. boiler and the steam was used to drive a 130 h. p. Robb Engineering Co.'s simple non-condensing engine belted to a temporary 75 k. w. monocyclic generator carrying the day load of the town, which is a purely residential district, and therefore has a light day load. As this was light the whole power was not used, and the steam was blowing off to the atmosphere from the boiler almost continually.

MEN:—The following staff comprised the personnel of the test Four men operating the destructor, one man attending to feed water, one man reading pressures and temperatures, one man checking weights and measures and taking gas analysis, one superintendent of test.

METHOD OF MAKING TRIAL:—The corporation (municipal) carts dumped the garbage into the large storage bin which had been cleaned out over night, and gave the checker the weight ticket as the cart was emptied. All large tins and unburnable refuse were picked out and put to one side and weighed separately afterwards. Fires were started at 7.55 a. m. with a light supply of old wood and a little coal, on clean grates, and kept in until 9.50, when the first weighed loads were dumped into the hopper. Firing with garbage commenced at 10 o'clock with the destructor warmed up, two men raking the refuse from the bin into the charging holes, and two men at the same time levelling the charge from the rear. Each fire was charged in turn, its steam blast being shut off during this process. After burning for about two hours (during which period fresh garbage was added to each fire every 20 minutes), the mass was thoroughly clinkered and it was then withdrawn from the front and dropped through the floor into the clinker pit below, whence it was removed to be weighed. Tins, etc., were also deposited in this bin for weighing. Fires were each clinkered three times. When the fires were well burned down and ready to clinker for the third time the test was ended, the burnt clinker being left on the grate bars over night to keep the destructor warm for the next

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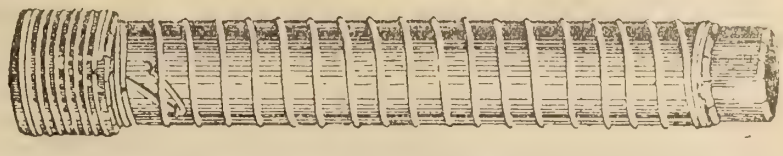

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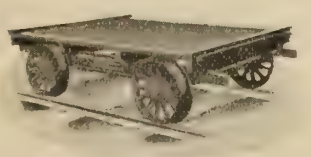

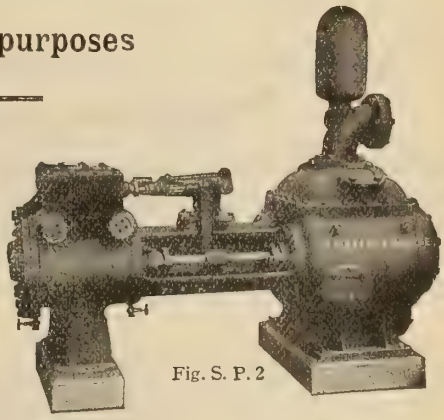

Fig. S. P. 2

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day's operation. This clinker was drawn and weighed the first thing Friday morning.

The boiler was fed through the Knowles pump and Williams regulator, and the level of the water in the drums was maintained practically constant through the test. The water for the test was pumped from a barrel submerged in the hot well and fed from two barrels arranged so as to be filled and emptied alternately. The quantity was very carefully watched, and the barrels gaged very closely. Readings of pressures and temperatures were taken every twenty minutes, gas analyses were taken several times during the run, and combustion chamber temperatures were read about six or seven times under different conditions. At the end of the trial the conditions were as nearly as possible the same as at the beginning, the water level in the boiler being the same, as well as in the hotwell, and all other conditions were carefully watched and attended to.

RESULTS OBTAINED:—The following table shows in condensed form the averages of the results obtained:

Duration of test	8 hours 32 minutes
Number of cells	3
Total grate area	75 square feet
B. & W. Boiler, heating surface	2,197 " "
Refuse consumed, (composition of waste material)	
Garbage manure and leaves	15%
Ashes and unburnt (anthracite) coal, cinders, etc.	65%
Iron, wood, bottles, tins, leather, etc.	5%
Refuse, including paper, branches, old furniture, etc.	15%
Total	100%

WEIGHTS.

Unscreened refuse, rubbish, garbage, manure, etc.	38,090	pounds
Tins, etc., not burned	540	"
Net amount consumed	37,550	"
Refuse consumed per hour	4,402	"
Refuse consumed per hour per square foot of grate	58.7	"
Weight of clinker remaining after combustion	15,880	"
Percentage of clinker and ashes to refuse consumed	42.1%	

WATER EVAPORATION.

Total water evaporated	41,991	lbs.
Water evaporated per hour, actual	4,920	
" " " " " " " " from and at 212° Fahr.	5,970	
" " lb. of refuse from and at 212° F., and per sq. ft. of total heating surface per hour	2.72	
Water evaporated per lb. of refuse, actual	1.12	
" " " " from and at 212° F	1.36	

PRESSURES AND TEMPERATURES.

Temperature of outside air, average	55° F.
Barometric pressure average	29 5 ins.
Average steam pressure	123.5 lbs. sq. ins.
Average pressure in ashpits	1.74 ins.
Average vacuum at chimney base	9/16 in.
Average temperature of combustion chamber over 2 318 F. (Copper melted in 1¼ minutes—wrought iron was also fused.)	
Lowest temperature in combustion chamber	1,742° F.
Average temperature of air entering regenerator	75° F.
Average temperature of air leaving regenerator	206° F.
Average temperature of gases entering regenerator	427.5° F.
Average temperature of gases leaving regenerator	333 7° F.
Average temperature of feed water	47° F.

GAS ANALYSIS.

Percentage of CO_2 average of six readings	10.9%
Percentage of CO_2 highest reading	13.6%
Percentage of CO_2 lowest reading (clinkering fires)	4.5%

TIMES.

Time taken to clinker one grate	10½ min.
Time between clinkerings	2 hrs. 48 min.
Time each fire was clinkered	Three

REMARKS:—A delay of about three-quarters of an hour was caused by non-delivery of garbage in the early part of the afternoon, during which time no fresh charge was added to the fire. Had this not been the case the total quantity of refuse could easily have been destroyed within eight hours, as the fires had to be held back somewhat on this account, and a somewhat better showing could have been made in the burning powers of the destructor had sufficient garbage been delivered to force it to its utmost capacity.

An interesting feature of the trial was the good feed water regulation; neither pumps nor valves being touched during the whole test.

Some idea of the great heat generated when the fires are in full blast may be obtained from the fact that at one time a piece of copper tubing 1½ ins. long by 1 in. in diameter by 3/32 in. thick was completely volatilized in 1¼ min., upon being placed in the combustion chamber, and a wrought iron horseshoe was picked out from the clinker heap which was fused in severa places (wrought iron fuses at 2,912 F.) The same thing happened to an earthenware pot made of refractory material.

The clinker produced was hard and vitreous, and was fused into large masses of great density. Almost no smoke was visible from the chimney top, and all noxious gases were conspicuous by their absence. The analysis of the flue gases shows how complete the combustion was, except during the process of clinkering, when the large doors of the furnaces being open let in a large amount of air.

In consideration of the foregoing we are very pleas d to state that in our opinion the destructor has fulfilled all the requirements of our specifications, and has also demonstrated the maker's guarantee satisfactorily, and we have much pleasure in recommending its acceptance.

Trusting that the above will meet with your approval, we are,

Yours faithfully,

ROSS & HOLGATE,

Consulting and Supervising Engineers.

80 St. Francois Xavier St., Montreal, May 4th, 1906.

In response to a request for a statement of capital cost and conditions and cost of operation of the destructor Messrs. Ross & Holgate have sent to us the following information:

CAPITAL COST OF DESTRUCTOR.—It is almost impossible to say at this date what the cost of the buildings, land, bin, etc., fairly chargeable to the destructor itself, will be, as the whole equipment of the boilers and destructors together with coal and garbage storage and the necessary accessories, is contained in one building which is at yet unfinished and whose cost has not yet been separated, but the following items are approximately correct:

Meldrum three-grate destructor, about	$14,000.00
B. & W. water-tube boiler connected to destructor, about	4,500.00
Custodis chimney, total cost, about	6,000.00

(Only partly chargeable to the destructor, as it is common to all three boilers.)

OPERATING EXPENSES:—There are four men employed in the operation of the destructor for feeding, leveling and clinkering, as well as looking after the boiler. The wages paid are:—One man at 25 cts. an hour and three men at 20 cts. an hour. The 20 long tons of garbage per day are disposed of in about ten hours, so that at present only one shift is required and the labor change for destruction amounts to about 42½ cts. per long ton. Of course, there will be quite a considerable amount of steam sold to the electric plant which must be credited to the destructor and some clinker and other by-products will also be sold.

NET UNIT COST:—To obtain the net cost of destruction the capital charges and labor costs must be added, and the sum of the amounts obtained from the sale of steam and by-products subtracted from the total. The net costs so found, divided by the tons consumed per year, will give the average cost per ton.

Sova & Barbour, plumbers, Winnipeg, have dissolved partnership.

The partnership of M. P. and J. T. Davis, contractors, Quebec, Que., has been registered.

Joseph Avard and Cesire Souriol, contractors, Montreal, have registered their business under the firm name of Avard & Souriol & Company.

Joseph W. Guimond and Mrs. Ernest Lemieux, Montreal, have registered their contracting business under the name of Lemieux & Company.

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Penmans Limited, Montreal, incorporated, capital $4,000,000. Promoters, T. C. Casgrain, V. E. Mitchell, E. F. Surveyor, A. C. Casgrain, and E. M. McDougall.

Snyder Health Vibrator Company, Limited, Montreal, incorporated, capital $20,000. Promoters, G. DeClercq, A. Cote, S. Mondou, D. E. LeCavalier, and A. P. Simar.

Stuart Turbine Company, Limited, Montreal, incorporated, capital $20,000. Promoters, H. A. Allen, G. Hannah, T. M. Todd, P. Davidson, and A. J. Collins.

Megadyre, Limited, Montreal, incorporated, capital $250,000 to manufacture and deal in explosives, powders, etc. Promoters, C. A. Barnard, C. Dessaulles, R. Roy, C. A. Sara and W. F. Sharswood.

Ground Anchor Company, Limited, Montreal, incorporated, capital $25,000. Promoters, F. E. Lovell, Coaticook, Que.; R. A. Stinson, F. J. Bell and E. Sissons, Montreal, and F. W. Hibbard, Westmount.

John Morrow Screw Limited, Ingersoll, Ont., incorporated, capital $100,000 to manufacture and deal in iron, steel, lead, copper, etc. and products thereof. Directors, J. A. Coulter, Ingersoll; W. H. Shapley and F. H. Deacon, Toronto; O. E. Robinson, Ingersoll, and W. H. Wortman, London.

Beaver Lumber Company, Limited, Toronto, incorporated, capital $150,000. Directors, F. H. Potts, H. Hunter, and A. Wellesley.

PERSONAL.

Mr. A. McEvoy, city clerk of Vancouver, B.C., has resigned that position.

Mr. John F. Armour, engineer of the town of Dundas, Ont., has tendered his resignation to the town council.

Mr. J. G. Macklin, Guelph, Ont., who has been divisional engineer of construction for the eastern forty miles of the Guelph and Goderich Railway from Guelph west, has received the appointment of chief engineer of construction of the St. Mary's and Western railway, from Woodstock to St. Mary's.

Mr. A. J. Stewart, for over thirty years town clerk of Harriston, Ont., and Mrs. Stewart, are taking a holiday in Winnipeg. This is Mr. Stewart's first trip to western Canada. His son, Fred M. Stewart, is also in Winnipeg being the secretary of the Manufacturers' association.

Mr. William Stubbs, of Winnipeg, formerly manager of the Independent Lumber Company's yard at Regina, Sask., was a recent visitor in that city. It is the intention of the firm with which Mr. Stubbs is now connected to open up a branch in Regina next year for the supply of Tyndall stone and other building materials.

Mr. John E. Botterell, manager of Vancouver branch of the Canadian Fairbanks Company, Limited, has been appointed manager of the Winnipeg branch suceeding Mr. F. R. Newman, who will become the head of Caverhill & Learmonts western branch. Mr. Newman on leaving was presented with a diamond ring from the staff, and was given a dinner by Mr. H. J. Fuller, the president, at which a large number of the staff were present. Mr. W. A. Akhurst suceeds Mr. Newman as manager at Vancouver.

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							Neat.					3 (Sand) to 1 (Cement)				
					Initial	Final	1 dy.	7 dys.	28 dys.	3 mos	1 yr.	1 dy.	7 dys.	28 dys.	3 mos.	1 yr.
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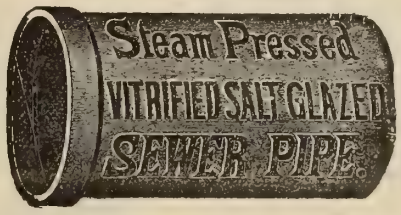

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COST OF SEWERS AT GUELPH, ONT.

Some notes on the cost of 9-in. lateral sewers, built (except No. 1, in table) in 1904 as a part of a separate system of sewers at Guelph, Ont., are given in the Proceedings of the Ontario Land Surveyors for 1905, and are republished here in slightly condensed form. The author of the notes was Mr. James Hutchinson, of Guelph. It is to be noted that the sewers were built by day labor, with a single gang of men, mostly Italians, all under one foreman. Ordinary laborers were paid 16½ cts. per hour, but 17½ cts. were given to a few better class men, who handled pipe and sheeting when required. Bricklayers were paid 35 cts. an hour, and the foreman was paid $3.50 a day.

The accompanying table, with its foot notes shows the, character, length and cost of each of 12 laterals:

Cost of 9-in. Lateral Sewers Built in 1904 at Guelph, Ont.

Sewer No.	Length ft.	Depth, ft Maximum.	Depth, ft Minimum.	Depth, ft Average	Cost of Excavating, pipe laying & backfilling.	Labor per foot of sewer.
1	972	12.9	10.4	12.0	$974	$1.00
2	550	12.0	9.3	10 9	421	.76½
3	1,298	12 4	9 5	10.8	911	.70
4	658	12.5	8.9	10 7	478	.79½
5	900	12.7	8.6	10.2	631	.70
6	1,780	13.5	7.0	10.0	1,304	.73
7	1,150	11.2	8.0	9.3	585	.51
8	1,696	12.2	6.5	9 0	930	.55
9	830	10.8	7.6	8.9	465	.56
10	840	9.7	8 0	8.6	474	.56
11	800	9.7	8.0	8.4	351	.44
12	600	9.8	5.2	7.0	235	.39

No. 1.—Begun in 1904; cost increased by difficulties of work after winter set in, and by wet condition of partially dug trenches in spring.

No. 2.—Very bad ground.

No. 3.—Trench yielded many limestone boulders; there was some 100 ft. of quicksand bottom, requiring close sheeting. Otherwise the ground was good, little bracing was required.

No. 4.—Mostly dry gravel; required sheeting.

No. 5.—Chiefly sand, with clay at deepest part. Sheeted for about half its length. Wet bottom; 6-in. subsoil drain beside and a little below sewer.

No. 6.—Middle third of this was most difficult work of 1904. Soil gravel, with water 4 ft. from surface. Diaphragm pumps used ahead, and in the bottom water allowed to flow away in the sewer and subsoil drain.

No. 7 and 8—In adjacent, parallel streets, but there was water-bearing gravel one-third length of No. 8.

Nos. 9 and 10.—In different drainage areas, but both had gravel in deeper portions, sand at upper ends, and subsoil drains; also two manholes in each.

No. 11.—Soil gravel and for the most part dry. Close sheeting not required; occasional braces used. Work was rushed, thus reducing cost.

No. 12.—Ground similar to No. 11.

For further description the paper

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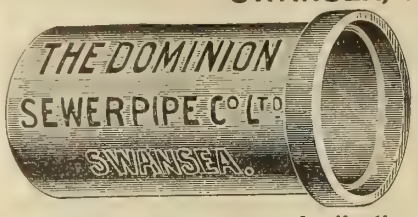

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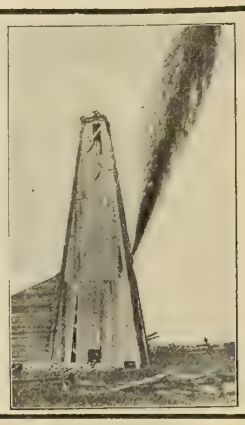

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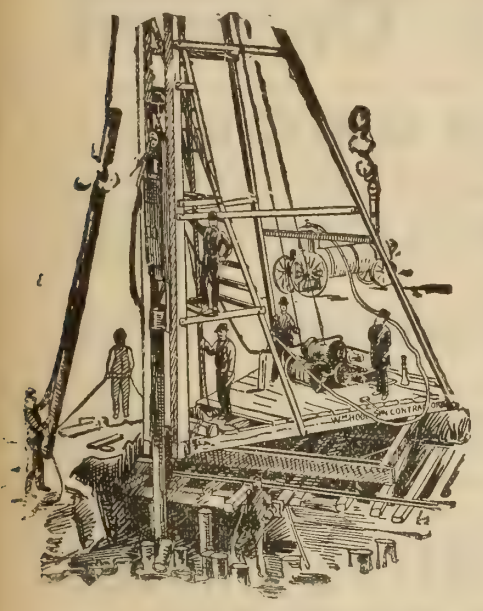

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mentioned may be quoted, as follows:

The cost includes unloading the sewer pipe and the brick from the cars, the building of manholes and the removal of stones and surplus earth from the streets, as well as the excavating, pipe laying and backfilling.

The street surfaces were of gravel. The ground was variable, sand, gravel and clay often being passed through on the same sewer. On the whole, however, the conditions were favorable for economical work.

The width of trench varied from 3 to 4 ft., according to the depth of the sewer and the nature of the ground. Trench screws with 1½-in. gas pipe were used for bracing. For sheeting 1½-in. dry hardwood, 8 ft. long, was found most satisfactory; green lumber will not stand driving. Tamarack, 4 x 6 ins., used for stringers.

The backfilling was put in by hand and was not tamped, but the trenches were flooded with water from the fire hydrants. After the filling had settled for some time, the street surface was made good with the road grader and the steam roller. The cost of this work was not charged to the sewer account.

The manholes were mostly between 300 and 400 ft. apart and were circular in plan, 4 ft. in diameter at the bottom to height of about 4 ft., and then drawn in to about 2½ ft. The labor of building the manholes was between 3 and 4% of the whole cost of the labor.

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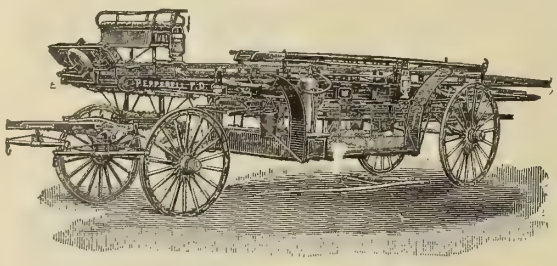
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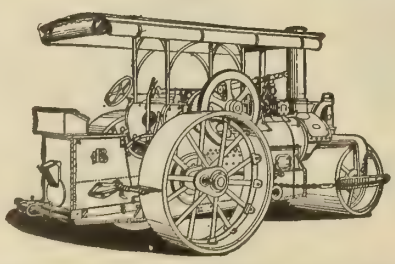
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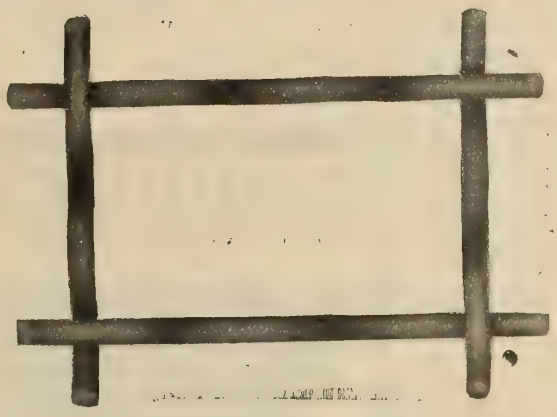

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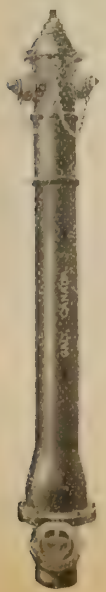

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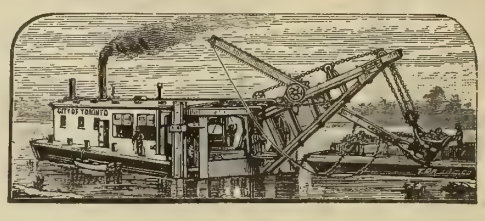

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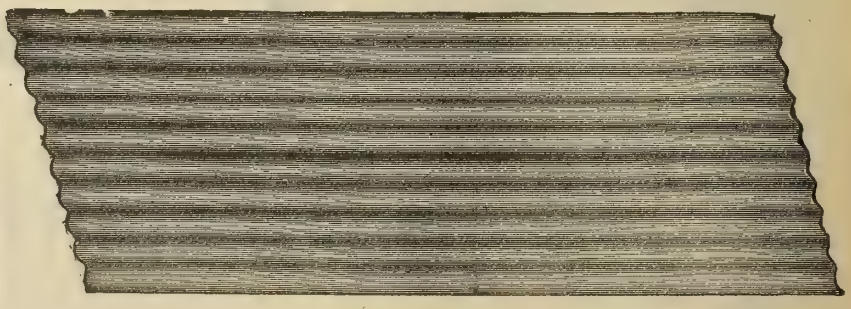

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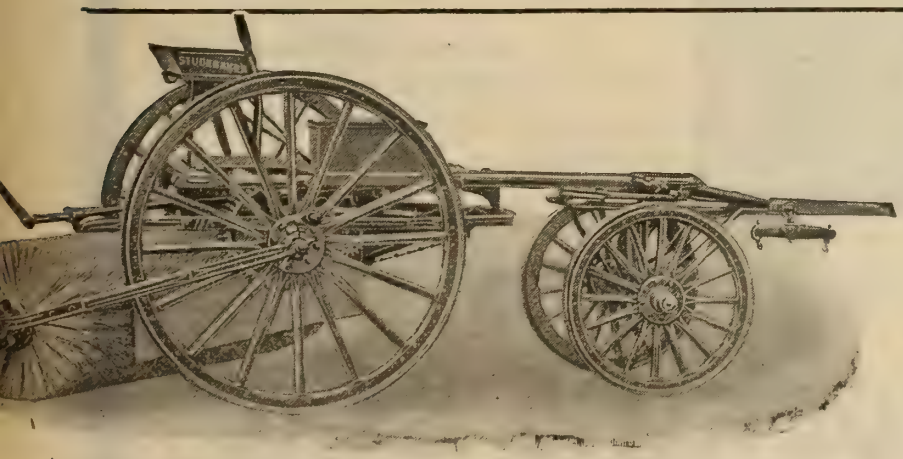

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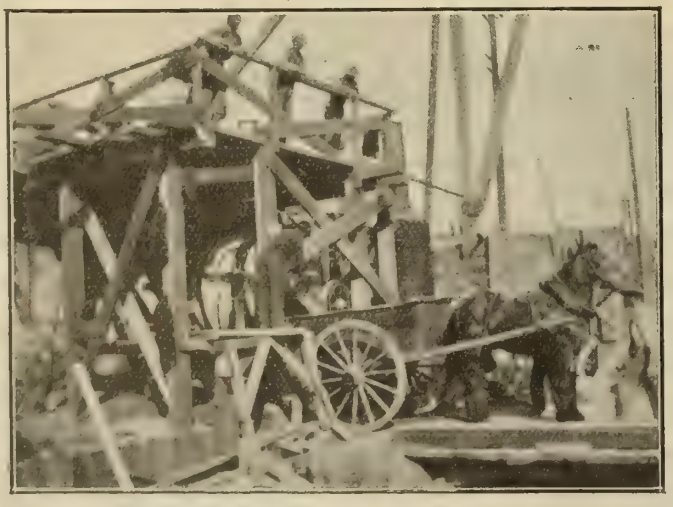

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CONTRACT RECORD

A Weekly Journal of Engineering, Public Works, Tenders, Advance Information and Municipal Progress

This Paper Reaches Every Week the Town and City Clerks, Town and City Engineers, County Clerks and County Engineers, Leading Civil Engineers and Contractors throughout Canada, and Purchasers of Municipal Debentures.

VOL. 17. TORONTO, MONTREAL — OCTOBER 10, 1906 — WINNIPEG, VANCOUVER No. 31

THE CANADIAN CONTRACT RECORD
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Sealed Tenders Wanted

For Dunnville Water Works Debentures

Tenders will be received by the undersigned up to the 22ND DAY OF OCTOBER, 1906, for the purchase of thirty debentures aggregating $6,000.00 drawing 4½ per cent. from the date this by-law shall take effect, viz, 20th day of June, 1906, in accordance with By-law Number 6. A D 1906, of the Town of Dunnville, Ont

The Council reserve to themselves the right to reject any or all tenders.

J. W. HOLMES, Clerk.

TOWN WATER WORKS

SEALED TENDERS

will be received by the undersigned for the Iron piping, Hydrants, etc., and labour to lay the piping, etc., required to carry out the scheme of the proposed extensions of the water mains as follows:

1050 ft. 6 inch Piping.
4300 ft. 4 inch Piping.
5 Hydrants, 9 Tees, and 4 Cut-offs.

Total length of trenching about 5,350 feet. Parties tendering may offer for the whole job or may put in separate tenders, one for the piping, hydrants, etc., and the other for the trenching and laying the pipes, etc. complete. For further particulars apply to the undersigned. Tenders to be delivered on or before 5 o'clock p. m. 15TH OCTOBER, 1906, and no tender necessarily accepted.

A J. REYNOLDS, M. D.,
Chairman Fire and Water Committee.
Mount Forest, October 3rd, 1906.

The partnership of J. U. Bordua & Co., dealers in cement, etc., Montreal, has been dissolved.

TENDERS WANTED

$3,500 Debenture Bonds For Sale

Tenders will be received up to SATURDAY, OCTOBER 13TH, 1906, addressed to G. M. Farrington, Mayor, for the purchase of Public School Debentures of the Town of Picton, in amount $3,500. Full particulars furnished on application. Address

R. A. NORMAN,
Clerk Town of Picton.

THE BOARD OF EDUCATION

TENDERS WANTED

Sealed tenders, addressed to the Secretary-Treasurer of the Board, will be received until

FRIDAY NOON, OCTOBER 12th, 1906,

for the several trades necessary in the erection of a

High School Building in Riverdale

also for the enlargement of

Rosedale Public School

and for re-constructing

Building on Pembroke Street

for manual training class.

Specifications may be seen and all information obtained at the offices of the Board, City Hall. Each tender must be accompanied by the deposit mentioned in the said specifications and forms of tender.

The lowest or any tender will not necessarily be accepted.

W. C. WILKINSON,
Secretary-Treasurer.
H. SIMPSON,
Chairman of Committee.

Chantigny & Morency, contractors, Montreal, have dissolved partnership.

A new plumbing business in Welland, Ont., is being operated by Griffiths & Grass.

A plumbing business has recently been started in Strathcona, Alta., by C. V. Houghton.

The Canadian Westinghouse Company, Hamilton, Ont., have been awarded a big contract to build electrical machinery for the Yukon Consolidated Engineering Goldfields Company.

CONTRACTS OPEN.

STAR CITY, SASK.—O. Haney intends erecting a new residence on Main street.

PORT HOPE, ONT.—The Y.M.C.A. are considering the erection of a new building.

FORT WILLIAM, ONT.—A large addition is to be built to the McKellar hospital.

BOLTON, Ont.—The Imperial Bank are considering the erection of a new bank building.

ROSTHERN, SASK.—The Massey-Harris Co. purpose erecting a large brick warehouse here.

WEYBURN, SASK. — J. Mitchell, postmaster, intends erecting a new building, cost $5,000.

PRINCE ALBERT, SASK.—The Massey-Harris Co. intend building a warehouse here.

BRANDON, MAN.—The City Council are considering alteration to the city hall cost $50,000.

BANFF, ALTA. — Rattray & McDougall have secured a site on which a new hotel will be erected.

EBURNE, B. C.—The B.C. Market Co. are calling for tenders for the construction of a new abattoir.

PRESTON, ONT.—Harry Marshall intends erecting a brick residence on the new survey, Breslau Park.

KEMPTVILLE, ONT.—It is expected that a new public library building will be erected here, cost $3,000.

HUMBOLDT, SASK.—The establishment of a brewery here is being considered by some of the residents.

BATHURST, N. B. — It has been decided to repair the bridge between the town and the I. C. R. station.

NEWMARKET, ONT.—W. Hutt intends erecting a double house, corner Millard ave. and Joseph street.

ARCOLA, SASK.—A company has been formed to erect a new grist mill here. John Lees is interested.

CALGARY, ALTA. — An Eastern company are considering the erection of a match factory here to cost $50,000.

MONCTON, N. B.—J. Edington, city engineer, has taken tenders for construction of pipe sewer in Archibald street.

CHESLEY, ONT.—The by-law to guarantee a loan of $15,000 to the Chesley Bedstead Company has been carried.

PORT ARTHUR, ONT.—F. Lee, Division Engineer, has taken tenders for erection of a new C. P. R. station here.

ST. JOSEPH DE LEVIS, QUE.—Soundings are being taken for a site for a

new dock, which it is expected will soon be built here.

KENORA, ONT.—J. T. Brett has purchased a site on First street for a new residence, for which plans are being prepared.

GODERICH, ONT.—A by-law will be voted on to loan $50,000 to establish a large factory here for an American company.

FORT FRANCIS, ONT.—Plans and specifications of electric light system are being prepared by John Galt, C. E., Toronto.

CARMAN, MAN.—The by-law to raise $1,500 by debentures for erection of a new school in Stephenfield district has been carried.

LADNER, B. C.—The School Trustees have endorsed the petition to the Government for a new school building on the Scott road.

THOROLD, ONT.—The report of Willis Chipman, C. E., Toronto, on a waterworks system here has been adopted, cost $80,000.

BARRIE, ONT.— Strathy & Esten represent a syndicate of local capitalists interested in the establishment of a street railway in town.

ST. BONIFACE, MAN.— Tenders for construction of pavement on Kitson and Horace streets, Oak Park, will soon be called.

DUNDAS, ONT.—It is understood that the Cataract Power Company are looking for a site here for a car building and repair shop.

RAINY RIVER, ONT.—John Galt, C. E., Toronto, is preparing plans and reports for waterworks, sewerage and electric light for the town.

TORONTO JUNCTION, ONT.—The Toronto Presbytery have authorized the purchase of a site in the north west part of the town for a new church.

MOOSE JAW, SASK.—H. Jagger, will receive tenders up to October 15th for heating and ventilating system for King Edward school, South Hill.

AINSWORTH, B. C.—Tenders will be received by the Highlander Mill & Mining Co., up to October 10th for continuation of the Highlander tunnel.

UXBRIDGE, ONT.—John Galt, C. E., Toronto, has been engaged to report on the improvement of the waterworks system for use for domestic purposes.

WOODSTOCK, ONT.—The Canada Furniture Manufacturers, Limited, are seeking a loan from the city to aid in erection of a new factory to cost $150,000.

AMHERST, N. S.—The Maritime Railway, Coal & Power Co. have purchased a site on Park street for a transforming station for their central power plant.

OLDS, ALTA.—The erection of the new firehall and council chamber will soon begin.—The School Board are discussing the erection of a new school building.

OWEN SOUND, ONT.—The Board of Trustees of the hospital are considering the erection of a new building or enlarging the present one. Plans are being prepared.

MIDDLEPORT, ONT.—S. J. McKelvey, township clerk, will receive tenders up to October 16th for purchase of five Onondage township debentures, for $577.44 each.

REVELSTOKE, B. C. — C. E. Cartwright Division Engineer, Vancouver, has taken tenders for construction of a concrete and steel addition to C. P. R. engine house.

MEDICINE HAT, ALTA.—The City Engineer has submitted a plan to the Council for overhead bridge to cost $2,800, and subway under the railroad at Toronto street, cost $7,750.

GORDON, ONT.—A. C. Mailloux, township clerk, will receive tenders up to October 13th for the portion of the Deslippe drain in Anderton township, also for construction of a culvert over said drain.

SASKATOON, SASK.—The Saskatoon Bedding Co. will erect a new factory corner Avenue D and Twenty-third street.—It is reported that the Federal Life Insurance Co. purpose erecting a large building here.

ST. GEORGE, N. B.—Hon. C. H. La Billois, Commissioner of Public Works, favors the erection of a new steel bridge to replace the present one t the foot of the falls.—Young's bridge is also to be rebuilt.

SYDNEY MINES, N. S.—D. C. Macdonald will receive tenders up to October 12th for installation of a sewerage system in District No. 1, of the town.—It is understood that the erection of a new station for the I. C. R. will soon begin.

DOVER SOUTH, ONT.—W. J. Foy will receive tenders up to October 12th for construction of seven steel bridges with concrete abutments on the Boyle drain in Dover township. Plans with above named and with John Welsh, Chatham.

TRACADIE, N. B.—F. Gelinas, Department of Public Works, Ottawa, will receive tenders up to Oct. 20th for construction of a laundry building and septic tank at the Lazaret. Plans at the Department and with Dr. A. C. Smith.

HALIFAX, N. S.—F. Gelinas, Department of Public Works, Ottawa, will receive tenders up to Oct. 15th for construction of a hot water heating system in the Trachoma hospital here. Plans at the Department and with C. E. W. Dodwell, Resident Engineer, this city.

REGINA, SASK.—F. J. Robinson, Department of Public Works, will receive tenders up to October 31st for construction of drain east of section 33, township 36, range 6.—It is understood that the Dominion Government intend enlarging the N. W. M. P. barracks.

GROSE ILE, QUE.—F. Gelinas, Department of Public Works, Ottawa, will receive tenders up to October 20th for construction of a disinfection house, etc., at the Quarantine Station. Plans with Ph. Beland, Post Office Building, Quebec, and at the Department.

LES ESCOUMAINS, QUE. — Gelinas, Department of Public Works, Ottawa, will receive tenders up to October 27th for construction of extension to wharf. Plans with Ph. Beland, Post Office Building, Quebec; C. Desjardins, Post Office Building, Montreal, at the Department and with Postmaster here.

OSHAWA, ONT. — The Electric Light Company here have started work on a new concrete drain, to designs prepared by Jno. S. Fielding, Consulting Engineer. The work will be done by day labor under the company's superintendent.

DELHI, ONT.—Contracts have not been awarded for generotors, wheels, etc., for the Delhi Light & Power Company's development, as the company have decided to increase the size of the units. New tenders will be called for by the engineer, Mr. Jno. S. Fielding, C.E., 15 Toronto St., Toronto.

SEVEN ISLANDS, QUE.—F. Gelinas, Department of Public Works, Ottawa, will receive tenders up to October 27th for completion of wharf and approach and removal of sunken crib. Plans with Ph. Beland, Post Office Building, Quebec; with J. C. Tache, Chicoutimi; at the Department and with Postmaster here.

LETHBRIDGE, ALTA. — W. S. Fairfield has taken tenders for the erection of additions to the buildings of the Lethbridge Brewing Co. Jas. A. Macdonald, architect.—It is reported that large machine shops for the C. P. R. are to be erected here.—The Board of Trade are preparing to establish a creamery here, cost $4,000.

PETERBORO, ONT.—John Kemp intends rebuilding his house on Douro street, which was recently burned.—The by-law to aid the Rapid Tool Company to establish a factory here did not carry.—The Coates Manufacturing Company intend erecting a carpet factory near the city. Homes for the operators are to be built adjacent to the factory.—Plans have been prepared for the enlargement of the Southern hotel, George street.

HAMILTON, ONT. — Chas Mills, architect, Canada Life Building, will receive tenders up to October 15th for erection of Terminal Electric station and theatre.—S. H. Kent, City Clerk, has taken tenders for construction of sewers in Picton, Wilson and Herkimer streets and Aberdeen avenue.—Mrs. S. Shaver, will build a brick residence on Hess street, cost $1,800.

LONDON, ONT. — G. Craddock, architect, will receive tenders up to October 12th for erection of a four roomed addition to Chesley avenue public school.—A. O. Graydon, city engineer, has taken tenders for construction of tile sewers in Mary and Egerton streets.—Ald. Matthews and Fire Chief Clark are looking for sites for new firehalls in east and north of the city.—A new residence is to be built on York street for the priest of St. Mary's church.

QUEBEC, QUE.—F. Gelinas, Department of Public Works, Ottawa, will receive tenders up to October 15th for construction of a heating system for the detention hospital at Savard Park. Plans at the Department and with E. M. Talbot, architect.—The G. N. R. intend locating their workshops in the city.—Sir A. P. Caron has been in the city attending to the purchase of a site for the proposed extension to Chateau Frontenac.

VANCOUVER, B. C.—The Merchants Bank are planning for the erection of an addition to their building on Carrall street.—The City Engineer considers a new septic tank necessary for Columbia avenue.—The G.T.P.R. are preparing for the erection of a large hotel at Prince Rupert, cost $20,000.—Building permits have been issued as follows: Vancouver Pipers' Society, hall, Seymour street, cost $3,000; F. Goldberg, residence, Keefer street, cost $2,400; W. G. Babcock, residence, Venables street, cost $2,000.

OTTAWA, ONT.—It is understood that the Transcontinental Railway commission will call for tenders in November for construction of about 500 miles of road as follows: Superior Junction, eastward; La Tuque, westward; Quebec, eastward; 200 miles, east and west of Lake Abittibi.—Preparations are being made for enlarging the city hall.—F. Gordeau, Department of Marine and Fisheries, will receive tenders up to October 18th for furnishing condensing machinery for a hopper dredge.

BRANTFORD, ONT.—Building permits have been issued as follows: Verity Plow Co., addition to warehouse, cost $14,290; W. H. Lee, double brick dwelling, George street, cost $2,500; James Long, brick dwelling, Port street, cost $1,400; Charles Coulson, brick dwelling, Victoria street, cost $1,450; Wm. Loudon, brick dwelling, Murray street, cost $1,100; The William Buck Co., two brick dwellings, Darling street, cost $1,550 each; David Spence, cement block

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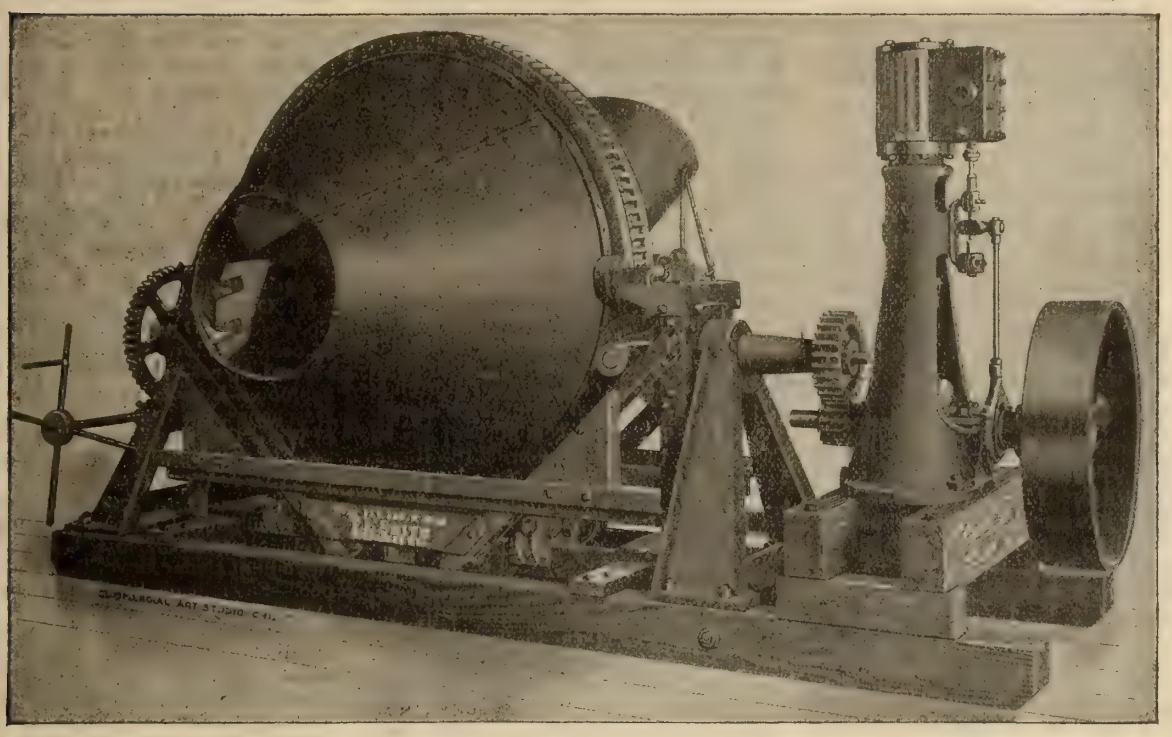

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MONTREAL

dwelling, Mary street, cost $1,200; Charles Churchill, Colborne street, brick dwelling, cost $1,100.

MONTREAL, QUE.—The City Surveyor gives notice of the intention to construct sewers in Marquette, Milton and St. Paul streets.—Jenkins Bros. of New York, valve manufacturers, intend erecting a factory here, cost $200,000.—The Montreal Steel Co. intend erecting a plant 400 by 300.—The Montreal Rolling Mills have plans prepared for a large nut and bolt plant and forging mill.—The Peck Rolling Mills Co. intend removing a portion of their plant to the bank of the Lachine canal where new mills will be erected.—Local and American capitalists are planning for the erecting of a nine story hotel on Dominion square. Jas. McShane, harbor master, is interested.

EDMONTON, ALTA.—K. McKenzie & Co., wholesale grocers, are considering the erection of a warehouse here.—Building permits have been issued as follows: T. B. Stapley, store, Namayo street, cost $2,000; S. J. Curry, dwelling, Fraser street, cost $1,500; J. R. Robinson, dwelling, Fourth street, cost $2,000; J. H. Watts, warehouse, Third street, cost $3,000; Andrew Herbut, dwelling, Kinistino street, cost $3,000; N. Lecier, office, Jasper street, cost $1,000; J. H. Watts, stores and offices, Jasper and Third streets, cost $5,000; W. H. Nightingale, schoolroom, Third street, $1,000; C. F. Cameron, theatre, Jasper street, cost $8,000; W. H. Allen, residence, Syndicate avenue, cost $2,200; W. B. Fullerton, residence, Sutherland street, cost $1,500; H. Gruner, two residences, Block 7, cost $6,700; David Latta, dwelling, Jasper avenue, cost $5,000.

WINNIPEG, MAN. — Contractor Boynjolsson has purchased the property, corner Carlton street and Qu'Appelle avenue, on which it is understood an apartment block will be erected.—The managers of the Keeley Institute have taken a permit for erection of a building, corner Hugo street and Jessie avenue, cost $35,000.—Bell & Galloway will erect a residence on Stradbroke place, cost $12,000.—The Northern Bank purpose erecting a large building in the north end.—St. John's Lodge of Free Masons intend erecting a building, corner Main street and Manitoba avenue.—It is reported that a syndicate of Eastern medical men purpose establishing a consumptive sanitarium at St. Laurient.—The Fire, Water and Light Committee will receive tenders up to October 22nd for supply of water-pipe and specials for the city waterworks.—The Works Committee have this week taken tenders for asphalt pavements on Logan, Alloway and Buell avenues and Victor, Argyle and Kate streets; sewers in Arlington and Powers streets and Sargent ave.; also granolithic walks.—Barton & Holman, architects, will receive tenders up to October 10th for erection of a residence, corner Spadina avenue and Joseph street, for Crotty, Love & Co.—The City Council gives notice of its intention to construct asphalt pavements on Higgins and Henry avenues, Academy road and Isabella street, also a number of granolithic walks and other works.

TORONTO, ONT.—Chas. F. Wagner, architect, is taking tenders for erection of brick and stone residence on Dundonald avenue, also for a cottage at New Toronto.—The Board of Education will receive tenders up to October 12th for erection of High school building in Riverdale, enlargement of Rosedale Public school, and reconstruction of a building on Pembroke street for Manual Training class.—The Board of Control will receive tenders up to October 16th for construction of asphalt pavement on Hepburn and Camden streets, Pape and Salem avenues, brick pavement on Windsor street, sewer in Eastern avenue and a number of concrete sidewalks.—C. E. Ireson has purchased the premises of Crawford Bros., corner Shuter and Young streets, on which he intends erecting a twelve story hotel.—Tenders are wanted for brick veneering and plumbing of a house on St. Clarence avenue. Apply to A. Willis, 690 Dufferin street.—Harton Walker, real estate dealer has sold a site on Wellington street, west of Bay for a new warehouse.—National Drug & Chemical Company of Canada have purchased a site on Wellington street west on which they intend erecting a five-story warehouse 60 x 200 feet, cost $50,000.—The W.C.T.U. have definitely decided to erect a new building to replace the Francis Willard Home, cost about $40,000.—The Argonaut Rowing Club wish to erect a club house on Mugg's Landing at the Island.—A committee has been appointed to secure subscriptions for the building fund of the Knox College.—Raynor & Lyall are asking tenders for all trades except masonry and carpentry on a pair of houses on Park road and Collier street.—Mr. Post, architect, Buffalo, has prepared plans for an extension to St. Michael's hospital, building of which will soon begin.—Building permits have been issued as follows: Miss Bessie Hicks, 2-story brick store, Bloor street, near Bartlett avenue, cost $3,000, Miller Cartage Co., 2-story brick blacksmith and paint shop, corner Dupont and Christie streets, cost $2,250; Wm. Davies Co., 2-story brick blacksmith and paint shop, Vine street, cost $4,500; Portch & Witchall, 2-story and attic brick dwelling, St. Anne's road, cost $6,000; M. F. Thompson, three 2-story brick dwellings, 345 Crawford street, cost $7,500; Chas. E. Proctor, pair 2-story and attic brick dwellings, Grace street, cost $5,000; William Bell, pair 2-story brick dwellings, Leslie street, cost $4,000; A. Brockman, 2-story and attic brick dwelling, Balmoral avenue, cost $3,000; J. W. Walker, four 2-story brick dwellings, Bathurst street, near Harbord, cost $10,000; Geo. A. Brown, 2-story and attic brick dwelling, St. Patrick street, near Spadina avenue, cost $3,000; S. G. Redway, 2½-story brick dwelling, Bain avenue, cost $3,500; Thomas Brick, 2-story and attic brick dwelling, 716 Broadview avenue, cost $4,500; Mrs. E. Gidden, 2-story and attic brick dwelling, Concord avenue, cost $3,000; Thomas Jenkins, 2-story roughcast dwelling, brick front, Russett avenue, cost $1,600; J. M. Wilson, 2½-story brick dwelling, 30 Langley avenue, cost $4,750; Gray & Sons, 2-story brick store and dwelling, College street, near Gladstone avenue, cost $3,000; Thomas Henry, 2-story and attic brick and roughcast dwelling, Clinton street, cost $1,800; Dowson & Chipcase, pair 2-story and attic brick dwellings, Davenport road, near Belmont street, cost $5,000; J. Palmer, 2-story brick dwelling, Bloor street near Lansdowne avenue, cost $2,000; Chas. Bulley, 2-story and attic brick dwelling, 33 Withrow avenue, cost $2,000; Miller Cartage Co., 2-story brick stable, Dupont street, near Christie, $10,000; J. J. McKinney, four 2½-story brick dwellings, Grace street, cost $10,000; J. Bishop, Esq, 2-story and attic R. C. dwellings, brick fronts, Markham street, near Barton avenue, cost $12,500; Milligan & Turner, pair 2-story and attic brick dwellings, Palmerston boulevard, cost $7,000; C. Cuttenden, 2½-story brick dwelling, Lynd avenue, cost $3,500; Wm. Saul, 2-story and attic brick dwelling, Davenport road, near Hazelton avenue, cost $2,000; Wm. Donohue, pair 2-story brick dwellings, Wallace avenue, cost $4,000; H. Hoffman, 2-story brick dwelling, Garden avenue, cost $2,600; J. Lochrie, 1-story brick store, Bloor street near St. Clarens avenue, cost $2,500; Mr. Sykes, 3-story brick dwelling, Hayden street, cost $5,000; T. H. Milligan, 1½-story addition to dwelling, 87 Ossington avenue, cost $2,500; Deeth & Sons, 2-story and attic brick dwelling, Arthur street, near Crawford, cost $2,500; Wm. R. Gregg, 1½-story brick dwelling, Forest Hill road, cost $4,000; Cameron & Campbell, 2-story brick factory, King street, near St. Lawrence, cost $8,000; Hutchins & Burns, 2-story brick apartment house, Spadina crescent, cost $10,000; H. Larkin, pair roughcast dwellings, brick fronts, Dovercourt road, near Van Horne street, cost $3,000; F. Buchanan, 2-story and attic brick dwelling, 655 Huron street, cost $1,800; E. L. Finn, pair 2-story brick veneer dwellings, Dovercourt Park, cost $2,000; W. R. Hunter, 2-story and attic brick dwelling, corner Lindsay avenue and Dufferin street, cost $3,400; Dunlop Rubber Co., 2-story brick rubber factory, Natalie avenue, cost $18,500; Archbishop O'Connor, 2-story brick school, corner Hamburg avenue and Shanley street; cost $11,000; Arthur Kent, 2-story brick and roughcast dwelling, Emerson avenue, cost $1,600; Walker & Parker, 4-story brick shoe factory, 150 Wellington, street west, cost $1,800.

FIRES.

Agricultural Society buildings, Bradford, Ont., loss $2,000.—Atlantic Soap Co.'s works, Don Esplanade, Toronto, loss $6,000.—Bank of Montreal building and several stores, Armstrong, B. C., loss $20,000.—Lumber yards of Fraser Bros., Deschenes, Que., loss $400,000.—Sheds of Ware Co., Hanover street, Montreal, loss $3,500.—Plant of Ontario Grape Growing & Wine Manufacturing Co., St. Catharines, Ont., loss $150,008.—Four story building of Toronto Building Society Wellington, B.C., loss $3,000.—Heap's sawmill at Cedar Cove, B.C., loss $200,000.—Sawmill of F. Hervie, Berriedale, Ont., completely destroyed. — Engine house and adjoining house of Edmonton Brick Co., Edmonton, Alta., completely destroyed.—Planing mill and sash and door factory of Arbuthnot Lumber Co., Winnipeg, Man., loss $25,000.—Annex of J. F. Cairns' store and other buildings, Saskatoon, Sask., loss $10,000.

CONTRACTS AWARDED.

BRANDON, MAN.—Erection of Collegiate Institute building: McDougall & Ireland, contractors, cost $47,878.

LETHBRIDGE, ALTA. — Residence, corner Burdette and Courtland streets, for C. V. Bennett: R. Virtue, contractor.

PORTAGE LA PRAIRIE, MAN.—$50,000 five per cent. town debentures: Wood, Gundy & Co., Toronto, purchasers.

EDMONTON, ALTA. — Erection of new warehouse on Third street, for Telfer Bros.: R. J. Manson, contractor, cost $17,565.

VANCOUVER, B. C.—Erection of new home on Hastings townsite for Children's Aid Society: N. A. Macgillivray, contractor.

DELORIMIER, QUE.—Drainage of Iberville, Dandurand, Chapleau and Masson streets: T. Charpentier, contractor, cost $23,000.

KAMLOOPS, B. C.—Erection of new school building: Construction work, R. MacKay, $24,675; heating, McLaughlin Bros., Vancouver, $3,285.

OSHAWA, ONT.—Construction of reinforced concrete bridge in the town: R. N. Hill, Toronto, contractor, cost $2,300. Connor, Clarke & Monds, Toronto, engineers.

BATTLEFORD, SASK.—Erection of new building, corner First ave. and Twenty-Second street, for Bank of Hamilton: J. H. Storer, contractor, cost $4,000.

RUSSELTON, ONT.—Construction of Edenvale bridge over the Nottawasaga

river, (reinforced concrete): McMillin & Costain, Toronto, contractors, cost $13,-250. Connor, Clarke & Monds, Toronto, engineers.

FORT FRANCIS, ONT.—Construction of waterworks and sewerage system: Labor, A. Shannon; cast iron, D.Y. Stewart & Co., Glasgow; steel water towers, Ontario Wind, Engine & Pump Co.; hydrants and valves, Canada Foundry Co.; tile pipe, Dominion Sewer Pipe Co., Swansea; sewer castings, R. McDougall Co., Galt. John Galt, C.E., Toronto, engineer.

WINNIPEG, MAN.—The Fire, Water & Light Committee have recommended that the tender of Caledonian Iron Works Co. for the supply of two Worthington Turbine Pumps, erected and installed complete, for the sum of $21,063, be accepted.—Erection of Bank of Commerce building on on Lemoine avenue: John Dolmer, contractor. Darling, Pearson & Over, architects.

TORONTO, ONT.—The following tenders were accepted for work on school buildings: Dewson street—Structural iron work, Dominion Bridge Co., $1,740. Phoebe street—Structural iron work, McGregor & McIntyre, $4,253. Grace street—Portable school carpentering, F. Westlake, $780; galvanized iron work, A. B. Ormsby Co., $120, and painting, R. G. Johnston, $65.—New factory building on Sorauren ave., for Chapman Double Ball Bearing Co.: Brick and stone work, Waghorn & Walker; carpenter work, James McKenzie.—The Temiskaming and Northern Ontario Railway Commission have awarded the following contracts for building spur lines: Charlton branch—from a point at or near Englehart to Charlton, eight miles: Canadian Construction Company, Montreal; Haileybury spur—from the main line at Haileybury to a point at or near the wharf, 1¾ miles: McQueen & Hunt, Arnprior; Kerr Lake branch—from the main line at Cobalt to the Kerr Lake region, about four miles: A. Spencer, Niagara Falls.

NEW COMPANIES.

Northern Finance Company Limited, Winnipeg, Man., incorporated, capital $250,000. Promoters, W. Grassie, W. Gray, W. A. T. Sweetman, J.R. Vernon, and K. G. McKillop.

Canadian Property Company, Limited, Toronto, incorporated, capital $100,000. Promoters, E. L. Middleton, W, M. Vale, T. C. Dawson, H. G. Mason and J. C. Whitaker.

Dominion Lumber Company, Limited, Quebec, Que., incorporated capital $825,000. Promoters, E. G. Meredith, C.E. Taschereau, Parent, L. A. Cannon and E.W. Ievers.

Rochester Mining Company, Limited. Toronto, incorporated, capital $40,000. Directors Z. Gallagher, E. N. Wilson, and H. M. English.

FOR FINISHING WALLS.

A rather novel method of finishing the outer surface of a reinforced concrete building was recently adopted in connection with a structure in Knoxville, Tenn., says The Record. The sides of the building have curtain walls of concrete brick, while the front and back walls are of monolithic construction. When the work was completed, the front elevation was treated to a cement solution applied by means of whitewash brushes. The solution consisted of water and cement of the consistency of thin grout, which was strained through cloth to remove any coarse particles that might scratch the concrete surface of the building. The coated surface was given a light and quick rubbing with carborundum bricks until a very smooth surface was obtained. The thickness of the solution prevented it from running off the wall and served as a plaster as well as a dressing. The result is a front of one color, which closely resembles limestone.

SEPTEMBER BUILDING TOTALS.

In Toronto during the past month 421 building permits were issued, the approximate value of which was $902,803, making a total from the beginning of the year of 2,695 permits, valued at $9,566,328. This shows a considerable increase when compared with the same period of last year, the permits for September, 1905, being 261, valued at $877,-005; for the first nine months of the year the permits were 2,109, valued at $7,945,784.

In Winnipeg the building permits for September aggregated in value $1,170,000; for the same month of 1905 the value was $781,150.

In Regina September permits were valued at $150,000 making a total for the first nine months of the year of 1,500,000.

Edmonton building permits for the month were valued at $191,696.

Alexis Gagnon and Alderic Quellette, carpenters, Montreal, have registered under the firm name of Gagnon & Quellette.

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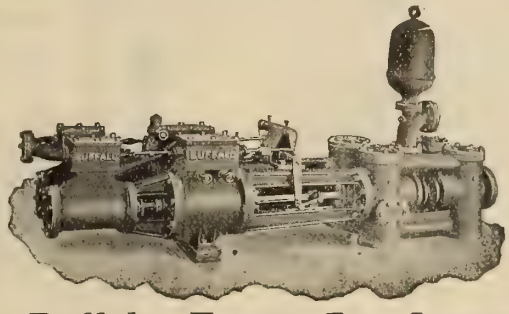

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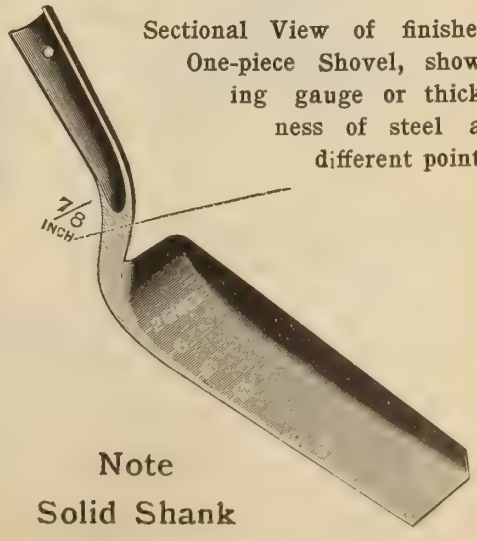

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CEMENT CONCRETE WALKS.

The City Engineer of Toronto in his last annual report says:

In 1905 the high water mark was reached in the construction of concrete sidewalks, 37½ miles having been laid. This is an increase of 6.442 miles, or 20 per cent. over the mileage laid in 1904, and 2.604 miles or 8 per cent. more than was laid in 1903, which, until last year, held the record for the greatest amount of work done under the supervision of this Department.

Only one brick sidewalk was constructed, with a mileage of .037 miles. The total length of permanent sidewalks constructed during 1905, was 37,537 miles and the total length in the City is now 187,206 miles.

The question of coloring the surface of concret walks was investigated, and walks on both sides of Sheridan avenue, north of Dundas street, were colored red and grey, respectively, to test the result. 8¼ pounds of Venetian red to one barrel of cement, and one pound of carbon black to one barrel of cement was used for the purpose, and these quantities were found to give a pleasing tint. It is feared, however, that the color is not permanent, a perceptible fading being already noticeable.

In constructing concrete sidewalks, a length of 80,958 lineal feet of concrete curb was built in place during the year.

During the year 1905, 279 concrete sidewalks were constructed, of which 95 were done by day labor. Of these 5 were ordered by council to be done by day labor, without the formality of calling for tenders. Four were taken from contractors on account of their dilatory methods of work, and the balance, 86 in number, were awarded to the City Engineer, he being the lowest tenderer. On 18 other walks the City Engineer's tender was also found to be lowest, but at the request of the next lowest tenderer he was allowed to do the work, under the supervision of this department, and at the City Engineer's figures, thus effecting a substantial saving to the property owners. The walks constructed under this system aggregate 9.00 miles, as compared with 3.07 miles as constructed in 1904.

In estimating the gain or loss resulting from the day labor system, if we take the lowest local contractor's tender as a basis of comparison on the walks for which tenders were invited, we find an actual gain of $5,356.85 on an actual expenditure of $34,699.03. The total cost of sidewalks constructed under the day labor system during 1905, exclusive of interest on money, was $42,874.91, as compared with $12,322,96 in 1904. While the mileage increase by 2.93 times the saving effected increase by 5.09 times when compared with 1904.

NOTES.

The difficnlty of surveying deep bore holes has been overcome by photography in South Africa, an apparatus devised by William Helme, of Johannesburg, having given accurate results in that not only the vertical drift of the hole, but also the position of the magnetic needle is recorded. The apparatus consists of a long brass cylinder which contains a small watch, a dry battery, two miniature electric lamps operating in connection with a compass supported on gimbal bearings, and a suspended plumb bob; at a predetermined time the watch makes a contact lighting the lamps, by means of which the positions of the plumb bob and the magnetic needle are photographed on a small disc of sensitized paper.

An ozone plant for water purification has recently been installed at Saint-Maur, near Paris. The water treated is taken from the river Marne and is usually clarified by deposition or filtering through sand, and is then driven through a sterilizer at a uniform rate of flow, in which air, after being impregnated with ozone, is brought into contact with it. The ozone is generated on the system of Frise, the electrified air being cooled to below 25 per cent., which is the temperature most favorable for ozone production. The electric current supply for the ozone production is furnished by an alternating current generator and transformers designed to deliver 40,000 volts alternating, which is driven by the 45 h.p. engine that also operates the 33,000 gallon centrifugal pump handling the water. The results of the process have been very satisfactory, the amount of energy consumed in handling 22,000 gal. of water per hour amounting to 48 h.-p.

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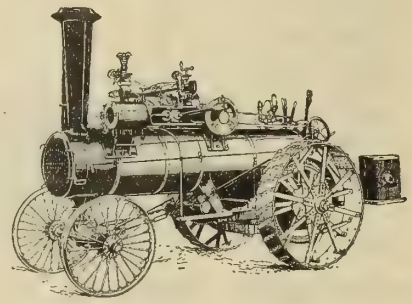

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Regina	21,215 sq. yds.	St. Catharines	4,600 sq. yds.
St. Boniface	18,272 sq. yds.	Total	129,161 sq. yds.

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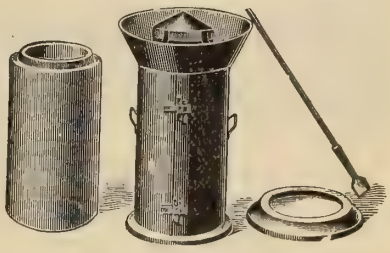

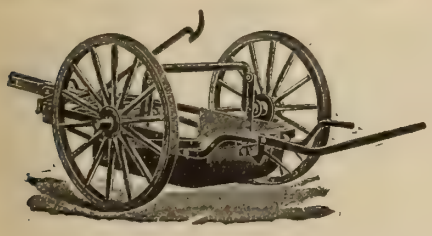

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ACCIDENT INSURANCE
Page
Ontario Accident Insurance Co. 19

BLUE PRINTS
Electric Blue Print Co. 7

BLOWERS
Buffalo Forge Co. 5

BRIDGES (CONCRETE)
Steel Concrete Co. 15

BRIDGES (STEEL)
Canadian Bridge Co. 19
Canada Foundry Co. 23
Dominion Bridge Co. 15
Jenks & Dresser 16
Phoenix Bridge and Iron Works 15

CEMENT
Alsen Portland Cement Co. 9
Bremner, Alex 6
Currie & Co., W. & F. P. 13
DeSola, C. I 7
Gray & Bruce Portland Cement Co. 21
Hyde & Co., F. 22
Hanover Portland Cement Co 19
Lakefield Portland Cement Co. 14
McNally & Co., W. 7
Morrison & Co., T. A. 13
Morgan, T. M. 15
National Portland Cement Co 12
Owen Sound Portland Cement Co. 7
Ontario Portland Cement Co. 16
Raven Lake Portland Cement Co. 13
Stinson-Reeb Builders' Supply Co. 17
Toronto Pottery Co. 22
Thorn Cement Co. 14

CONCRETE MIXERS AND MACHINERY
Dartnell, E. F. 6
Hopkins & Co., F. H. 24
Ideal Concrete Machinery Co. 18
Mussen & Co., W. H. C. 3
Morrison & Co., T. A. 13
Toronto Pressed Steel Co. 7

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Beatty & Sons, M. 22
Harris Co., J. W 20
Hopkins & Co., F. H. 24
Locomotive & Machine Co. 15
Mussen & Co., W. H. C. 3
Peat & Sons, James 14
Toronto Pressed Steel Co. 7

CONCRETE CONSTRUCTION
Ambursen Hydraulic Construction Co. 7
Loignon, A. & E. 7
Steel Concrete Co. 15

CONTRACTORS' EMPLOYMENT BUREAUS
Bryans & Co., E. E. 7
Zarossi, Banco 15

CORRUGATED IRON
Metallic Roofing Co. 5
Pedlar People 22

CRUSHERS (STONE AND ROCK)
Allis-Chalmers-Bullock 11
Beatty & Sons, M. 22
Dartnell, E. F. 6
Hopkins & Co., F. H. 24
Mussen & Co., W. H. C. 3
Morrison & Co., T. A. 13

DEBENTURES
Nay, Anderson & Co. 22
Stimson & Co., G. A. 21

DRILLING CONTRACTORS
Page
Harvey, J. 13
Peat & Sons, James 14

ENGINEERS AND CONTRACTORS
British Columbia General Contract Co. 23
Canadian White Co. 12

ENGINEERS (CIVIL)
Archibald, George H. 15
Chipman, Willis 17
Connor, Clarke & Monds 17
Davidson, Shirley 21
Davis, Johnston 15
Fielding, John S. 7, 8, 17
Galt, John 7
Jackson, John H. 17
Lea & Coffin 17
Leofred, A. 21
McConnell, Brian D. 13
McDougall & McRae 7
Parke, Roderick J. 17
Scott, Wm. Fry 21
Simpson, T. T 21

ENGINEERS (MECHANICAL)
Farmer, John T 21
Galt, John 7

ENGINES
Cameron & Co , Hugh 16
Sawyer & Massey Co 6

ELECTRICAL APPARATUS AND SUPPLIES
Drummond, McCall & Co 14
Northern Electric & Mfg. Co.

FIRE APPARATUS
Cameron & Co., Hugh 16
Meadows, George B., Toronto Wire, Iron & Brass Works Co. 9
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Seagrave, W. E., Walkerville, Ont. 16

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Allis-Chalmers-Bullock 11
Beatty & Sons, M. 22
Hood & Sons, Wm 19
Hopkins & Co., F. H. 24
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Canada Foundry Co. 22
Canadian Fairbanks Co. 13
Gartshore-Thompson Pipe & Foundry Co. 9
Kerr Engine Co. 8
Montreal Pipe Foundry Co. 9
McDougall Co., R. 21

LOCOMOTIVES AND RAILS
Gartshore, John J. 19
Locomotive & Machine Co. 15
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PILE DRIVING
Hood & Sons, Wm. 19
Russell, John E. 19

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Brunet, Joseph 17
Forest City Paving Co. 17
Nash Road 13
Ontario Asphalt Block Co. 17
Silica Barytic Stone Co. of Ontario 15
Warren Bituminous Paving Co. 7

PIPE (WOODEN)
Canadian Pipe Co. 9
Pacific Coast Pipe Co. 13

PIPE (CONCRETE)
Page
Dominion Concrete Co. 6

PUMPS AND PUMPING MACHINERY
Allis-Chalmers-Bullock 11
Canadian Buffalo Forge Co. 5
Canadian Fairbanks Co. 13
Canada Foundry Co. 23
Drummond, McCall & Co 14
McDougall Caledonian Iron Works Co., John 19

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Canada Foundry Co. 23
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Cameron & Co., Hugh 16
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Allan, Whyte & Co. 21
Greening Wire Co., B. 21

SECURITY BONDS
United States Fidelity & Guaranty Co. 21

STEEL BARS (CORRUGATED)
Corrugated Steel Bar Co. of Canada 16

STRUCTURAL IRON AND STEEL
Canada Foundry Co. 23
Dominion Bridge Co. 15
Jenks & Dresser 16
Locomotive & Machine Co. 15
McGregor & McIntyre 16
Phoenix Bridge & Iron Works 15

STONE
Crushed Stone, Limited 16
Doolittle & Wilcox 21

SHOVELS (STEAM)
Allis-Chalmers-Bullock 11
Beatty & Sons, M. 22
Locomotive & Machine Co 15

SEWER PIPE
Bremner, Alex 6
Canadian Sewer Pipe Co. 17
Dominion Concrete Co. 6
Dominion Sewer Pipe Co. 14
Toronto Pottery Co. 22

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CEMENT MORTAR AND CONCRETE*

INTRODUCTION.

The many letters received and referred to the Office of Public Roads with reference to the use of cement and the adaptability of concrete for various purposes have made it seem advisable to issue a short bulletin on the subject, in which aproper method of mixing concrete is described, together with a few of the many uses for which concrete is well adapted. No attempt has been made to give a technical discussion of the subject the sole objects being to treat in an elementary way those points in concrete construction which are of particular interest to the farmer.

CEMENT.

The term "hydraulic cement" is applied to one of the most useful materials of engineering construction and one which in recent years has become widely extended in its field of application. Hydraulic cement possesses the property of hardening, or setting under water, in which respect differs from lime, which does not harden except in the presence of air. Thus it is evident that in all places where air is excluded, such as foundations, thick walls, etc., cement mortar should be used instead of lime.

Only two classes of cement will be discussed here—Portland and natural. The difference between these is due partly to the method of manufacture and partly to the condition and relative proportions of the materials employed, which are, generally speaking, limestone and clay. In the manufacture of Portland cement the separate materials are mixed in such proportions as have been found by experience to give the best results. The mixing is done by grinding the materials together in mills, after which the mixture is burned at a very high temperature in kilns, and the resulting clinker ground to an impalpable powder is known as Portland cement. In the case of natural cement the materials used have been already mixed by nature in approximately the correct proportions, being found in the form of a rock which is generally classed as a clay limestone, or a limey deposit technically called calcareous clay. This material is burned at a much lower temperature than Portland cement. When the manufacture has each ingredient absolutely under control and can adjust the proportions to suit all conditions, it is reasonable to expect that a better and more uniform product will result than when the materials are found already mixed. Portland cement is far more extensively employed than natural cement on account of its superior strength, although the latter is frequently used in cases where great strength is of little importance. The superior strength and durability of cement is compared with lime, together with the low price at which it may now be produced, have caused the form to replace the latter in engineering construction to a great extent.

STORING CEMENT.—In storing cement care must be exercised to insure its being kept dry. When no house or shed is available for the purpose, a rough platform may be erected clear of the ground, on which the cement may be placed and so covered as to exclude water. When properly protected, it often improves with age. Cement is shipped in barrels or bags, the size of which usually are as follows :

Bulk and weight of cement in ordinary barrels and bags.

Kind of cement.	Per barrel. Quantity.	Per barrel. Weight (net).	Per bag. Quantity.	Per bag. Weight (net).
	Cu. ft.	Pounds.	Cu. ft.	Pounds.
Portland.....	3½	380	⅞	95
Natural *a*....	3½	300	⅞	75

a Western natural cement usually weighs about 265 pounds per barrel net.

CEMENT MORTAR.

Cement mortar is an intimate mixture of cement and sand mixed with sufficient water to produce a plastic mass. The amount of water will vary according to the proportion and condition of the sand, and had best be determined independently in each case. Sand is used both for the sake of economy and to avoid cracks due to shrinkage of cement in setting. Where great strength is required, there should be at least sufficient cement to fill the voids or air spaces in the sand, and a slight excess is preferable in order to compensate for any uneven distribution in the mixing. Common proportions for Portland cement mortar are 3 parts sand to 1 of cement, and for natural cement mortar, 2 parts sand to 1 of cement. Unless otherwise stated, materials for mortar or concrete are considered to be proportioned by volume, the cement being lightly shaken in the measure used.

A "lean" mortar is one having only a small proportion of cement, while a "rich" mixture is one with a large proportion of cement. "Neat" cement is pure cement, or that with no admixture of sand. The term "aggregate" is used to designate the coarse materials entering into concrete—usually gravel or crushed rock. The proportion in which the three elments enter into the mixture is usually expressed by three figures separated by dashes—as, for instance, 1-3-5—meaning 1 part cement. 3 parts sand, and 5 parts aggregate.

In the great majority of cases cement mortar is subjected only to compression, and for this reason it would seem natural, in testing it, to determine its compressive strength. The tensile strength of cement mortar, however, is usually determined, and from this its resistance to compression may be assumed to be from eight to twelve times greater. A direct determination of the compressivestrength is a less simple operation, for which reason the tensile test is in most cases accepted as indicating the strength of the cement.

MIXING.—In mixing cement mortar it is best to use a platform of convenient size or a shallow box. First, deposit the requisite amount of sand in a uniform layer, and on top of this spread the cement These should be mixed dry with shovels or hoes, until the whole mass exhibits a uniform color. Next form a crater of the dry mixtures, and into this pour nearly the entire quantity of water required for the batch. Work the dry material from the outside toward the center, until all the water is taken up, then turn rapidly with shovels, adding water at the same time by sprinkling until the desired consistency is attained. It is frequently specified that the mortar shall be turned a certain number of times, but a better practice for securing a uniform mixture is to watch the operation and judge by the eye when the mixing has been carried far enough. In brick masonry the mistake is frequently made of mixing the mortar very wet and relying upon the bricks to absorb the excess of water. It is better, however, to wet the bricks thoroughly and use a stiff mortar.

GROUT.— The term "grout" is applied to mortar mixed with an excess of water, which gives it about the consistency of cream. This material is often used to fill the voids in stone masonry, and in brick work the inner portions of walls are frequently laid dry and grouted. The practice in either case is to be condemned, except where the conditions are unusual, as cement used in tbis way will never develop its full strength.

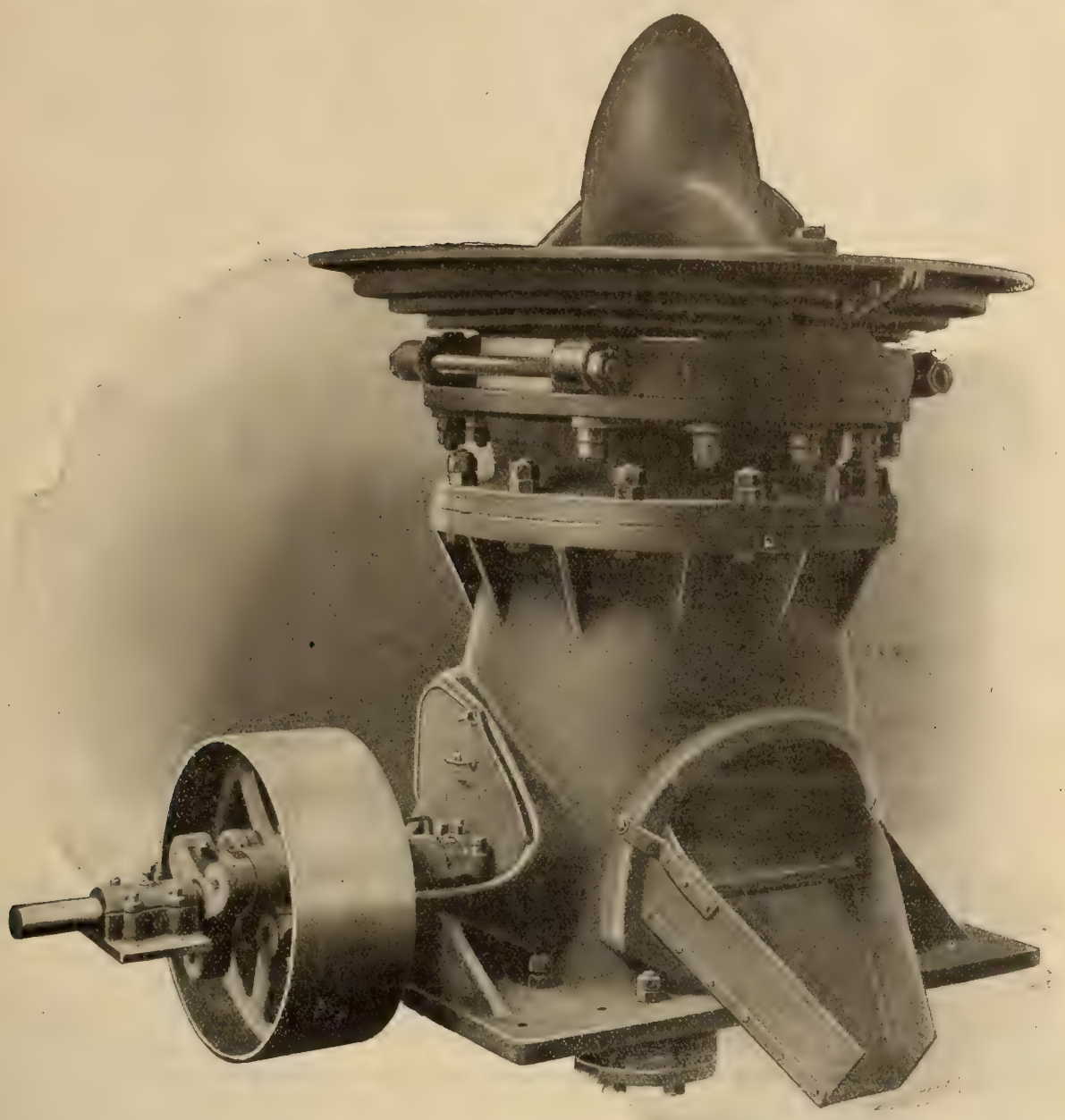
LIME AND CEMENT MORTAR.—L. C. Sabin *a* finds that in a Portland cement mortar containing three parts sand to one of cement, 10 per cent of the cement may be replaced by lime in the form of paste without diminishing the strength of the mortar, and at the same time renddering it more plastic. In the case of natural cement mortar, lime may be added to the extent of 20 to 25 per cent of the cement with good results. The increased plasticity due to the addition of lime much facilitates the operation of laying bricks, and has caused lime and cement mortar to become largely used.

CEMENT MORTAR FOR PLASTERING.—In plastering with cement, a few

*From Bulletin No. 235, issued by the United States Department of Agriculture.

*Babin, L. C., Cement and Concrete, 1905.

GATES "K" BREAKER



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precautions must be observed to insure good and permanent results. The surface to receive the plaster should be rough, perfectly clean, and well saturated with water. A mortar very rich in cement is rather a drawback than otherwise on account of shrinkage cracks, which frequently appear. The mortar, consisting of two or three parts sand to one of cement, should be mixed with as little water as possible and well worked to produce plasticity. It is essential that the plaster be kept moist until it has thoroughly hardened.

MATERIALS FOR MAKING CONCRETE.

SAND. — In securing sand for mixing mortar or concrete, if it is possible to select from several varieties, that sand should be chosen which is composed of sharp, angular grains, varying in size from coarse to fine. Such sand is, however, not always obtainable, nor is it essential for good work. Any coarse-grained sand which is fairly clean will answer the purpose. If gravel, sticks, or leaves be present they should be removed by screening. The voids in sand vary from 30 to 40 per cent, according to the variation in size of grains. A sand with different-sized grains is to be preferred, because less cement is required to fill the voids. By mixing coarse and fine sand it is possible to reduce the voids considerably.

It is customary to use the terms, "river sand," "sea sand," or "pit sand," according to the source of supply. River sand as a rule has rounded grains, but unless it contains an excess of clay or other impurities, it is suitable for general purposes. When river sand is of a light color and fine-grained it answers well for plastering.

Sea sand may contain the salts found in the ocean. The tendency of these salts to attract moisture makes it advisable to wash sea sand before using it for plastering or other work which is to be kept perfectly dry.

Pit sand for the most part will be found to have sharp, angular grains, which make it excellent for mortar or concrete work. Where clay occurs in pockets it is necessary either to remove it, or else see that it is thoroughly mixed with the sand. The presence of clay in excess frequently makes it necessary to wash pit sand before it is suitable for use.

The results of tests made in this laboratory would indicate that the presence of clay, even in considerable amounts, is a decided benefit to "lean" mortars, whereas it does not appreciably affect the strength of a rich mixture.

GRAVEL.—It is important that gravel for use in concrete should be clean, in order that the cement may properly adhere to it, and form a strong and compact mass. As with sand, it is well to have the pieces vary in size, thereby reducing the voids to be filled with mortar. The voids in general range from 35 to 40 per cent.

CRUSHED STONE.—The best stone for concrete work consist of angular pieces, varying in size and having a clean, rough surface. Some form of strong and durable rock is to be preferred, such a limestone, trap, or granite. The total output of the crusher should be used below a maximum size, depending upon the nature of the work in hand. All material under one-eighth inch will act as so much sand and should be considered as such in proportioning the mixture. Precautions must be taken to insure a uniform distribution of the smaller pieces of stone, otherwise the concrete will have an excess of fine material in some parts and a deficiency in others.

Less than 8 per cent. of clay will probably not seriously impair the strength of the concrete, provided

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							Neat.					3 (Sand) to 1 (Cement)				
					Initial	Final	1 dy.	7 dys.	28 dys.	3 mos.	1 yr.	1 dy.	7 dys.	28 dys.	3 mos.	1 yr.
1903	20	O.K.	3.135	2.1	162	345	307	701	783	827	*	74	214	299	367	*
1904	44	O.K.	3.150	2.0	132	342	300	744	848	914	938	86	262	354	401	427

* Tests for 1 year were not completed when records closed. 1905 report not yet issued.

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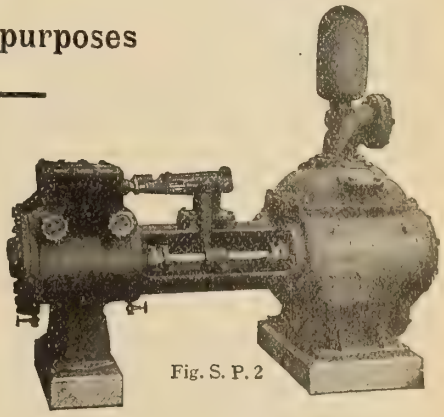

Fig. S. P. 2

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the stones are not coated with it, and may even prove a benefit in the case of lean mixtures. The voids in crushed stone depend upon the shape and variation in size of pieces, rarely falling below 40 per cent., unless much fine material is present, and in some cases reaching 50 per cent. A mixture of stone and gravel in equal parts makes an excellent aggregate for concrete.

STONE VERSUS GRAVEL.—It would appear from tests that crushed stone makes a somewhat stronger concrete than gravel, but the latter is very extensively used with uniformly good results. This superiority of stone over gravel for concrete work is attributed to the fact that the angular pieces of stone interlock more thoroughly than do the rounded pebbles, and offer a rougher surface to the cement. A point in favor of gravel concrete is that it requires less tamping to produce a compact mass than in the case of crushed stone. Then, too, the proportion of voids in stone being usually greater than in gravel, a porportionately greater amount of mortar is required to fill the voids, which means a slight increase in the cost of concrete.

CINDERS.—Cinder concrete is frequently used in connection with expanded metal and other forms of reinforcement for floor construction, and for this purpose it is well adapted on account of its light weight. Its porosity makes a poor conductor of heat and permits the driving of nails. Only hard and thoroughly burned cinders should be used, and the concrete must be mixed quite soft so as to require but little tamping and to avoid crushing the cinders. Cinder concrete is much weaker, both in tenson and compression, than stone or gravel concrete, and for this reason admits only of light reinforcement.

CONCRETE

GENERAL DISCUSSION.—Cement concrete is the product resulting from an intimate mixture of cement mortar with an aggregate of crushed stone, gravel, or similar material. The aggregate is crushed or screened to the proper size as determined from the character of the work. In foundation work, stone or gravel 3 inches in size may be used to advantage, whereas in the case of molded articles of small sectional area, such as fence posts, hollow building blocks, etc., it is best to use only such material as will pass a one-half inch screen. An ideal concrete, from the standpoint of strength and economy, would be that in which all voids in the aggregate were completely filled with sand, and all voids in the sand completely filled with cement, without any excess. Under these conditions there would be a thoroughly compact mass and no waste of materials.

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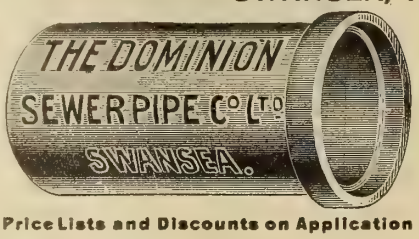

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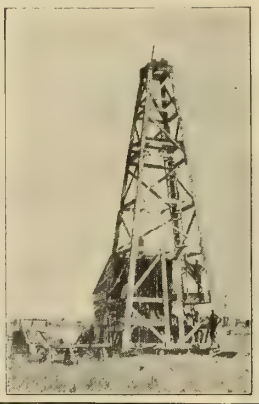

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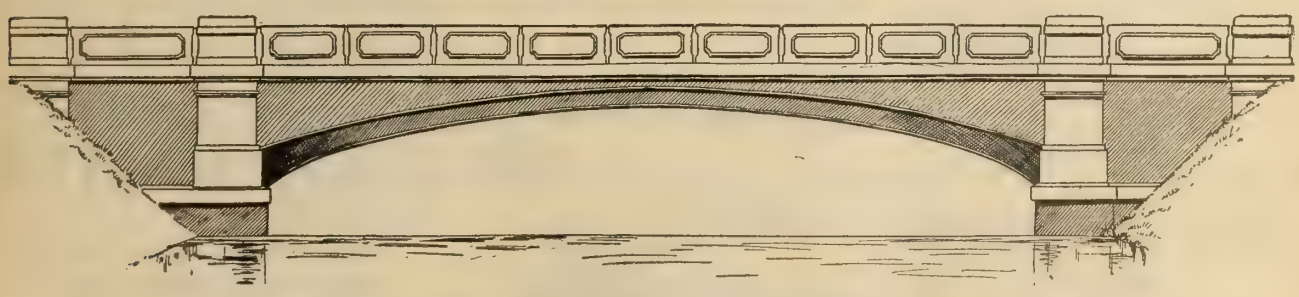

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aggregate, but in mixing concrete the proportions vary a great deal, depending in each case upon the nature of the work and the strength desired. For example, in the construction of beams and floor panels, where maximum strength with minimum weight is desired, a rich concrete is used, whereas in massive roundation work, in which bulk or weight is the controlling factor, economy would point to a lean mixture. When good stone or gravel is used, the strength of the concrete depends upon the strength of the mortar employed in the mixing and the proportion of mortar to aggregate. For a given mortar the concrete will be strongest when only enough mortar is used to fill the voids in the aggregate, less strength being obtained by using either a greater or less proportion. In practice it is usual to add a slight excess of mortar over that required to fill the voids in the aggregate.

It is more accurate to measure cement by weight, unless the unit employed be the barrel or sack, because when taken from the original package and measured in bulk there is a chance of error due to the amount of shaking the cement receives. As it is less convenient, however, to weigh the cement it is more common to measure it by volume, but for the reason stated this should be done with care.

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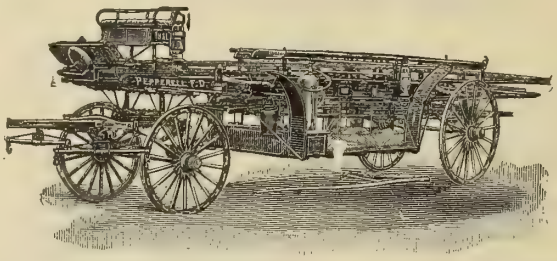
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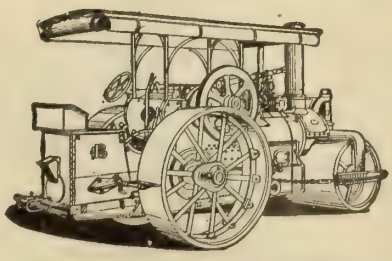
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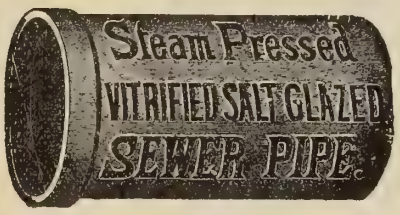

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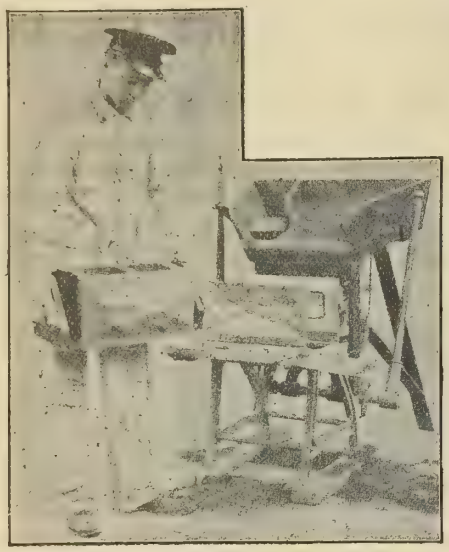

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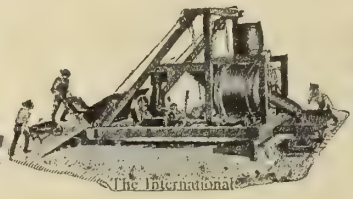
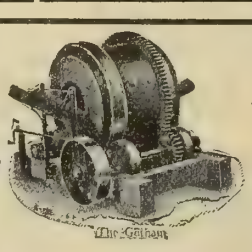
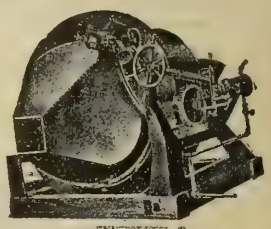

The International


The Gilbert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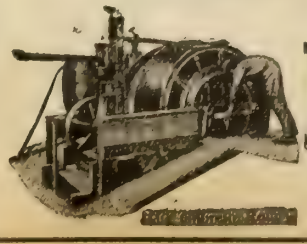

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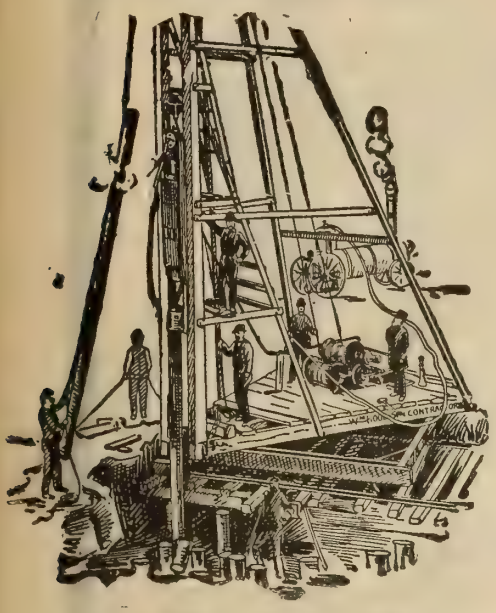

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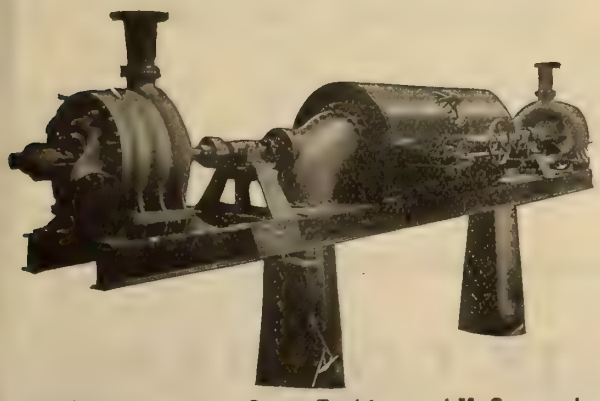

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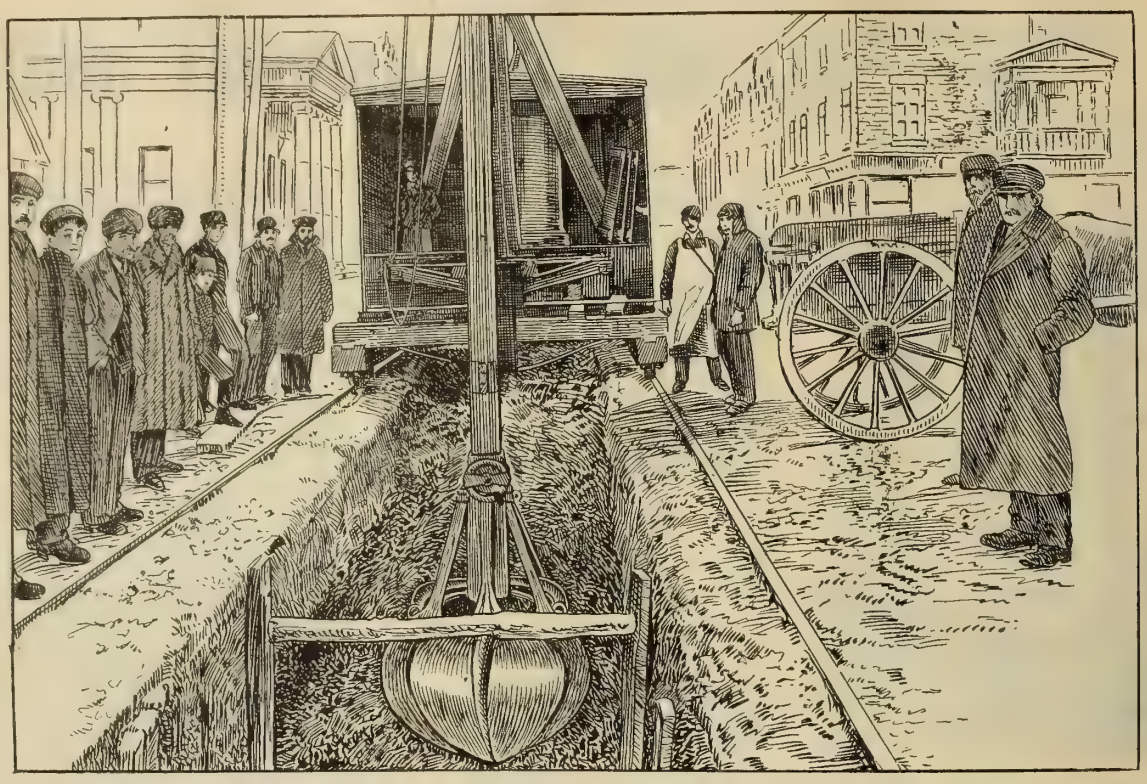

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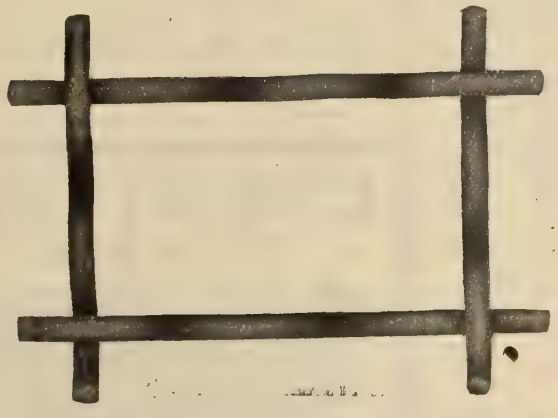

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" 2	11 50
" 3	10 00
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Brown	25 00
Roman Red	30 00
" Buff	35 00
" Brown	40 00
Hard Building	8 00
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B.C. Shingles:		
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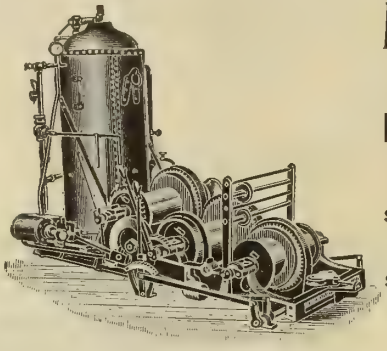

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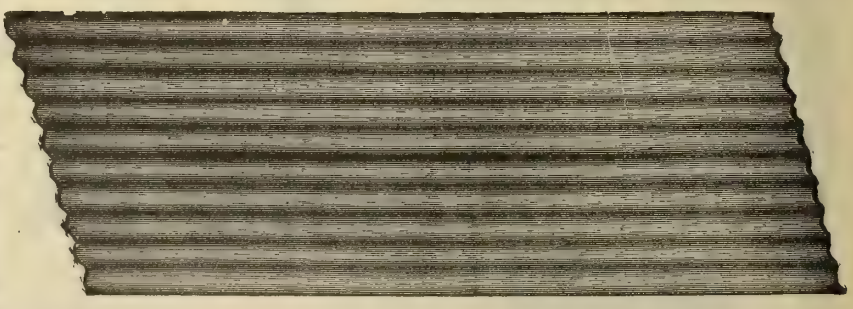

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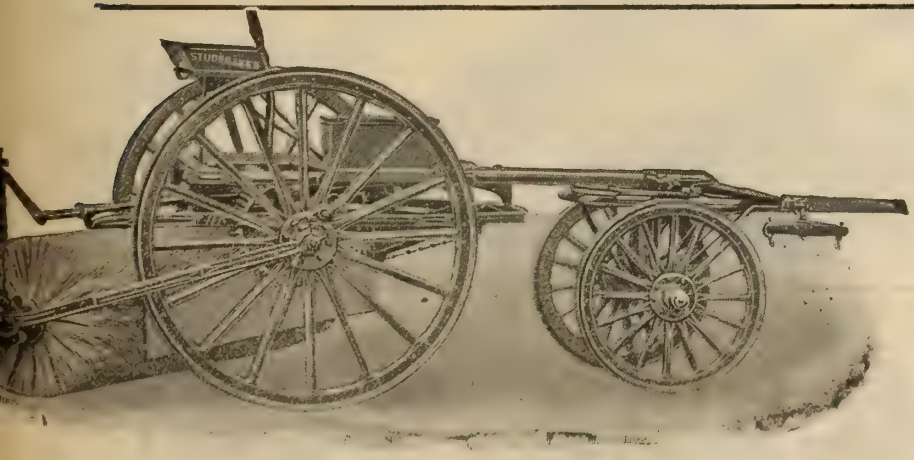

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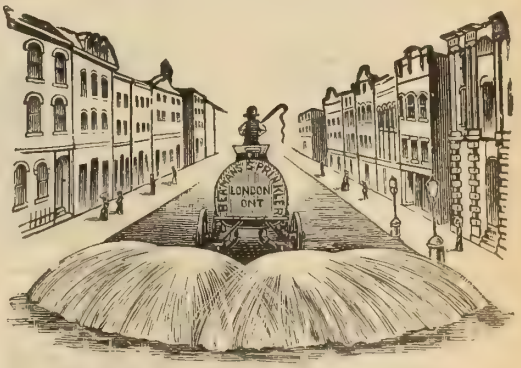

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We also make an . . .

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In Many Styles

ALL CAPACITIES IN STOCK - PRICES EXTREMELY LOW

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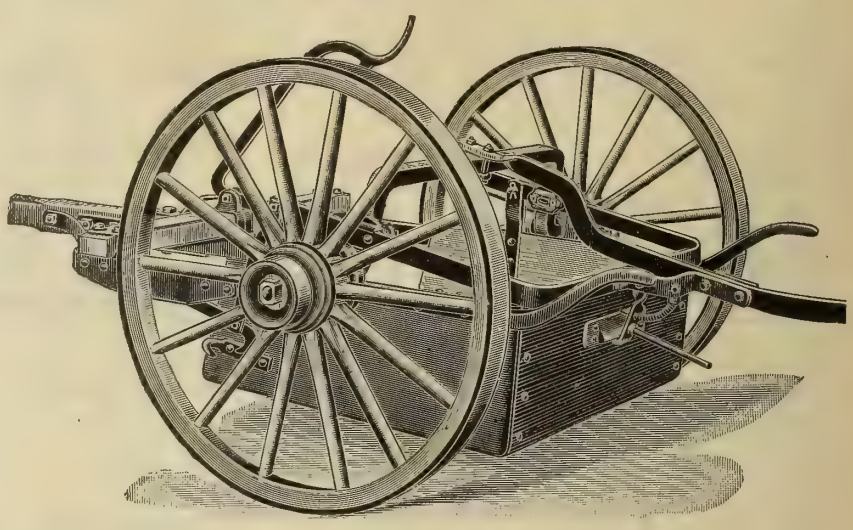
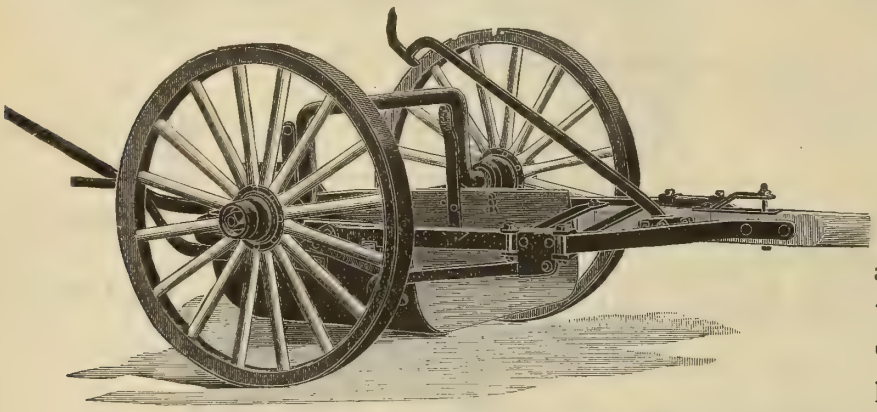
which is especially adapted to grading work.

This style of scraper is most popular with all contractors and is highly recommended wherever used.





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Wheelscraper

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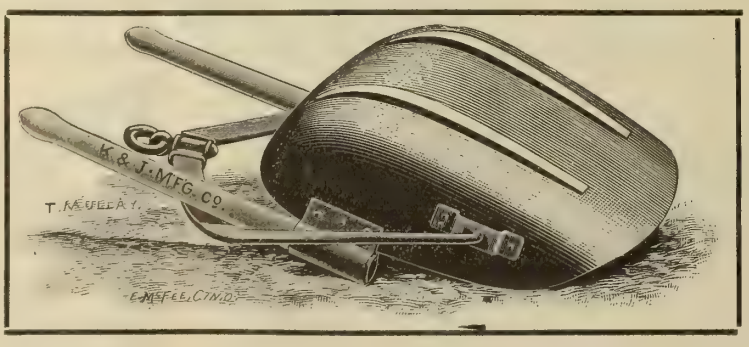
This scraper is easy to operate and is acknowledged by all users to be the best, strongest and easiest working wheeler ever put on the market.

ALL CAPACITIES - Drag Scrapers - ALL STYLES

Our Drag Scrapers are made of the same high grade material as our Wheelers, and any user of same will be perfectly satisfied that he has the best on the market.

LOW PRICES



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A Weekly Journal of Engineering, Public Works, Tenders, Advance Information and Municipal Progress

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VOL. 17. TORONTO, MONTREAL — OCTOBER 17, 1906 — WINNIPEG, VANCOUVER No. 32

THE CANADIAN CONTRACT RECORD
PUBLISHED EVERY WEDNESDAY
As an intermediate Edition of the Canadian Architect and Builder.

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Sealed Tenders Wanted

For Dunnville Water Works Debentures

Tenders will be received by the undersigned up to the 22ND DAY OF OCTOBER, 1906, for the purchase of thirty debentures aggregating $6,000.00 drawing 4½ per cent. from the date this by-law shall take effect, viz., 20th day of June, 1906, in accordance with By-law Number 6, A. D 1906, of the Town of Dunnville, Ont.

The Council reserve to themselves the right to reject any or all tenders.

J. W. HOLMES, Clerk.

Proposals For Bridge Superstructure

Sealed proposals addressed to Alderman J. G. Latimer, Chairman, Committee on Works, for erection of steel superstructure for Highway Bridge over the Red River at Redwood avenue, Winnipeg, will be received at the office of the undersigned up to 2.30 p. m. on

TUESDAY, NOVEMBER 20, 1906.

Plans, specifications and forms of proposal may be obtained at the office of Col. H. N. Ruttan, City Engineer, Winnipeg, Canada.

Each bid must be accompanied by an accepted cheque or draft payable to the order of the City Treasurer, or cash deposit for a sum equal to 5 per cent. of the total amount of the bid, which will be subject to forfeiture in case of failure on the part of the contractor to enter into a written contract with approved sureties if called upon to do so.

The City reserves the right to reject any or all tenders or to accept any bid which appears advantageous to the City of Winnipeg.

C. J. BROWN,
City Clerk.

City Clerk's Office, Winnipeg, September 12th, 1906.

TENDERS

will be received until TUESDAY, OCTOBER 22RD, 1906, at the office of S. H. Townsend, Architect, 15 Gerrard Street East, for the various works in the erection of two houses in Rosedale. The lowest or any tender not necessarily accepted.

Auction Sale of Dredge

The undersigned will offer for sale at their rooms, No. 69 St. James Street, Montreal, on

SATURDAY 3rd NOVEMBER, 1906,

at 11 o'clock a. m.

Dipper Dredge No. 3 belonging to the Harbour Commissioners of Montreal as she now lies damaged in the Commissioners Ship Yard alongside the Mackay Pier, in the Harbour of Montreal.

The dredge may be examined upon application at the Harbour Commissioners' office, No. 57 Common Street.

MARCOTTE BROS.,
Auctioneers.

TOWN OF ARCOLA, SASKATCHEWAN

Debentures for Sale

Sealed tenders addressed to the undersigned and marked "Tenders for Debentures," will be received up to 6 o'clock in the afternoon on the 1ST DAY OF DECEMBER, 1906, for the purchase of:

1. A thirty thousand dollar ($30,000) waterworks debenture of the town of Arcola, repayable in twenty (20) equal annual instalments and bearing interest at five and one-half (5½) per cent. per annum.
2. A five thousand dollar debenture for the completing and equipping of town hall of the town of Arcola, repayable in twenty (20) equal annual instalments and bearing interest at five and one-half (5½) per cent. per annum. Tenders will be received for amounts separately or conjointly.

No tender necessarily accepted. Further particulars may be had from the secretary.

J. S. BUSH,
Secretary Town of Arcola, Sask

Town of Arcola, Sask.

Contractors for water towers and tanks are invited to submit tenders, plans and specifications for the supplying and erecting complete at the town of Arcola, Sask.

(A) An elevated Steel Water Tank having a capacity of 60,000 imperial gallons erected on a Steel Substructure 40 feet high.

(B) An elevated Wood Water Tank having a capacity of 60,000 gallons erected on a Steel Substructure 40 feet high.

Tenders will be received by the Secretary-Treasurer at Arcola up to MONDAY, OCTOBER 22, 1906, at 5 o'clock p. m.

The lowest or any tender not necessarily accepted.

Further particulars may be obtained at the office of John Galt, C. E. & M. E., Toronto.

J. S. BUSH, Secry.-Treas., Arcola.
JOHN GALT, Consulting Engineer, Toronto.

PEWS WANTED

Church pulpit, pews and schoolroom chairs in good condition to seat 350. Apply Box 88, CONTRACT RECORD.

TOWN OF PRESTON WATER WORKS PUMPING MACHINERY

Tenders will be received by the undersigned up to 6 p. m., MONDAY, NOVEMBER 5TH NEXT, for the supply of Pumping Machinery for the Preston Water Works.

Specifications may be seen at the office of Davis & Johnston, Engineers, Berlin and Galt. The lowest tender not necessarily accepted.

C. R. HANNING,
Town Clerk.

TOWN OF FORT FRANCES
PROVINCE OF ONTARIO

TENDERS FOR

WATER WORKS AND ELECTRIC LIGHTING

Contract "H"—The supply F. O. B. Cars For Frances of a 1,000 gallon Underwriter Fire Pump.

Contract "I"—The supply, erection and building in of one 16' x 72" Return Tubular Boiler.

Contract "J"—The supply and erection of a 75 K. W., A. C. Generator with engine direct connected, also all materials and labor necessary for the construction of the Electric Light Distribution System.

Sealed tenders will be received by the Town Clerk, until 8 p. m. on THURSDAY, NOVEMBER 1ST, 1906.

Plans aud specifications may be seen and forms of tender obtained at the office of the Town Clerk, or at the head office of the Chief Engineer.

J. C. BARR, Esq., Mayor.
W. H. ELLIOTT, Esq., Town Clerk.
JOHN GALT, C. E. & M. E.
Chief Engineer, Toronto.

CONTRACTS OPEN.

STRATHCONA, ALTA. — Davison & Co., will erect a two-story planing mill here.

BATTLEFORD, SASK.—The Board of Works will have plans prepared for a new town hall.

LETHBRIDGE, ALTA.—It is proposed to erect a modern curling and skating rink here.

HULL, QUE. — The International Portland Cement Co. purpose doubling their plant in this city.

REGINA, SASK.—Chas. Hyman & Co., London, Ont., have purchased a site here for a warehouse.

ST. ANDREWS, N. B.—It is proposed to widen and extend the channel to make it more convenient for steamers.

FERGUS, ONT.—A by-law has been carried to loan the G. T. R. $716,490 to build a spur line to quarries of J. Gow.

ELMIRA, ONT.—The Council will have an engineer report on the cost of establishing a waterworks system here.

WIARTON, ONT.—The Dominion Government have decided to have the new fish hatchery constructed here, cost $12,000.

PONOKA, ALTA. — The Christian Mission congregation have purchased a site on Donald avenue for a new church building.

HASTINGS, ONT.—A site has been purchased and plans are being prepared for the new radiator factory being established here.

BRAMPTON, ONT.—Two by-laws have been carried to raise money for sewage system, cost $26,000 and for music hall, cost $15,000.

SAULT ST. MARIE, ONT.—The Lake Superior Corporation will build an addition of 500 feet to their ore dock at the steel plant.

SUMMERLAND, B. C.—W. A. Elliott, architect, Brandon, Man., is preparing plans for the new Baptist College to be erected here.

CAMPBELLTON, N.B.—L.T. Joudry has taken tenders for roofing, etc., of the Council Chamber building. J. A. P. Bulman, architect.

STRATFORD, ONT.—The time for receiving tenders for erection of the Normal school building has been extended until the 20th inst.

NORTH BAY, ONT.—The date for receiving tenders for erection of the Normal school building here has been extended to October 20th.

LILLYFIELD, MAN.—G.A. Mantle, c/o National Trust Co., Winnipeg, will receive tenders up to October 20th for erection of a church here.

BRANDON, MAN.—The City Council have decided to have plans and estimates prepared of the proposed alterations in the city hall building.

HESPELER, ONT.—A by-law will be voted on October 22nd to guarantee a loan to the Hespeler Machine & Tool Co. to establish a foundry here.

HALIFAX, N. S.—The City Council have adopted the plans for the new engine house on Morris street and tenders for its construction will soon be called.

BOISSEVAIN, MAN.—The Turtle Mountain Milling Co. are calling for tenders for the erection of a galvanized warehouse. Plans at the Union Bank.

KENORA, ONT.—C. C. Delbridge has purchased a lot, corner Main and Second streets on which he intends erecting a four-story hotel, cost $80,000.

PORTAGE LA PRAIRIE, MAN.—The Hart-Parr Co., of Charles City, Iowa, have decided to build a factory here for the manufacture of gasoline engines.

LACHINE, QUE. — The Hussey Construction Co. have had plans prepared by Marchand & Haskell, architects, Montreal, for a new building on 21st street.

WOODSTOCK, ONT.—City Engineer Ure has reported on storm sewer system tocost $6.500. — Subscriptions are being solicited for the proposed Y.M.C.A. building.

NELSON, B. C. — The Methodist General Confederence have adopted the recommendation of the Education Committee regarding theestablishment of a college here.

GRAVENHURST, ONT.—A by-law will be voted on November 9th to raise $45,000 for establishing an hydro-electric power plant at South Falls and transmission to the town.

SYDNEY, N.S.—N. H. Morrison will receive tenders up to October 17th for erection of a church on Victoria road for St. James congregation. R. B. Whitten, architect, Ross Block.

HAVELOCK, ONT. — The School Board have decided to make an addition to the present school building, cost $1,000.—T. Curtis intends erecting a residence on Alexander street.

SASKATOON, SASK.—An American company are negotiating for privileges for establishing a large mill here.—The Roman Catholic Church are contemplating the erection of a new hospital here.

NEW WESTMINSTER, B. C.—Eastern capitalists are considering establishing a soap factory here.—A site has been purchased and plans prepared for buildings for the New Westminster Pipe Co.

MOOSE JAW, SASK.—It is expected that the erection of the new C.P.R. hotel will begin in the near future.—The work of building the factory for the Saskatchewan Canning & Packing Co. will soon begin.

AMHERSTBURG, ONT.—J. H. C. Leggatt, Town Clerk, has taken tenders for construction of silex walks on Maple avenue.—The Kent Canning Co. are considering the establishment of a factory here.

RAPID CITY, MAN.—W. C. Kent will receive tenders up to October 18th for erection of a public hall and lodge room for the I.O.O.F. Plans with above named and with W. A. Elliott, architect, Brandon.

OTTAWA, ONT.—F. Gelinas, Department of Public Works, Ottawa, will receive tenders up to October 25th for the supply of 10,000 barrels of Portland cement (in barrels or bags) at St. Andrews, Man.

PRINCE ALBERT, SASK. — The School Board have secured a site for a new Collegiate Institute building.—A by-law is to be voted on October 26th to grant $25,000 towards the C. N. R. right of way and station site.

EDMONTON, ALTA. — The Provincial Government have selected the site occupied by the Hudson Bay fort for the new Parliament Buildings.—A by-law has been carried to raise $75,000 to purchasa the G. T. P. R. right of way to the city.

ARCOLA, SASK.—J. S. Bush will receive tenders up to October 22nd for erection of an elevated steel water tank, 60,000 gal. capacity on a steel superstructure, also for an elevated wood water tank on a steel superstructure. John Galt, Toronto, engineer.

MONTREAL, QUE.—Marchand & Haskell, architects, have completed plans for building for Hussey Construction Co. at Lachine, brick building 100 x 125 feet. — The Westmount Town Council are considering plans for construction of a new intake pipe in the St. Lawrence.—The C. P. R. carbuilding sheds at the Montreal works are to be enlarged.

WELLAND, ONT. — The Streets and Sidewalks Committee have reported on the cost of sewers as follows: On Hellams avenue, from Lincoln street to Welland river, cost $13,500; Burgar street, $19,600; on Hellams avenue, from Lincoln street to the Government drain, $12,000. — A by-law has been carried to grant $5,200 for sites, sewage, etc., for the Supreme Heating Co., and the Canada Forge Co.

PETERBORO, ONT.—The School Board are considering enlargement of the north ward school, cost $20,000.—The time for receiving tenders for construction of Normal school has been extended to October 20th.—The American Cereal Co., purpose erecting a large flour mill on the completion of the Trent canal.—A new boat for the Department of Railways and Canals will be built here next season, cost $5,000.

QUEBEC, QUE. — The Transcontinental Railway Commission are conferring with other railway companies regarding the erection of a new union station.—New York capitalists are considering the building of a railroad in the district north of Lake St. John.—Building permits have been issued as follows: L. D. Freve, building, corner St. Oliver and Augustin streets, cost, $2,000; C. Vezina, building, corner King and Dupont streets, cost $1,000.

HAMILTON, ONT. — F. Gelinas, Department of Public Works, Ottawa, will receive tenders up to October 26th for additions and alterations to Post Office building, Plans at the Department and with caretaker of Post Office.—S. Kent, City Clerk, will receive tenders up to October 19th for the interior carpentry, heating, plumbing, plastering and electric wiring of new patrol station, Mary street. Plans with Stewart & Witton, architects.—The works committee has been authorized to spend $2346 on macadamizing Ferrir street, and $1732 for macadamizing Wellington street.

WINNIPEG, MAN.—J. H. G. Russell, architect, has taken tenders for plastering and elecrric wiring for a store and apartment house for J. J. Vopni.—D. Murray is calling for tenders for repairs on the Vendome hotel.—F. Gelinas department of Public Works, Ottawa, Ont., will receive tenders for 10,000 barrells of Portland cement, in bags and barrells for St. Andrew's Rapids.—The Home Bank are opening offices in the McIntyre block, which will be remodelled. — The Bank of Nova Scotia have purchased a site, corner Portage and Garry streets on which they will erect an office building to cost $200,000.

VANCOUVER. B. C.—Plans for the extension of the Bank of Montreal building are being prepared and work will soon begin.—H. Bell Irving and Co. will receive tenders up to October 17th for grading lot and building retaining wall on Harwood street.—W. T. Whiteway, architect, has prepared plans for a large hotel, corner Abbott and Water streets, cost $45,000,—Building permits have been issued as follows: British Columbia Market Co., business block, Alexander street, cost $25,000; A. St. George Hamersley, business block, Water street, cost $45,000; John Coville, dwelling Ontario street, $1700; Mrs. E. Sharp, dwelling, McLean drive, $1000; W. W. Brehaut, Robinson street, three houses, $1500 each; J. E. Wright, dwelling, Seventh avenue, $2500; J. E. Dodson, dwelling Quebec street, 1200; E. F. Odlum, dwelling Grant street, $1600.

TORONTO, ONT.—J. P. Hynes, architect, will receive tenders up to October 31st for erection of an eight-story steel frame fire-proof hotel on Yonge street for F. W. Mossop.—Tenders have been taken by the Board of Control for the laying and joining of pipes, valves, hydrants and special castings for the high pressure fire service.—The Toronto Rowing Club have applied for a site for a club house on the lagoon at Hanlan's Point.—The C. N. R. are looking for a site in the vicinity of Ashbridge's bay for a large smelter.—Tenders are wanted at 375 Park avenue for carpenter work of four houses.—An appropriation of $40,000 for decorating walls, etc., of the City

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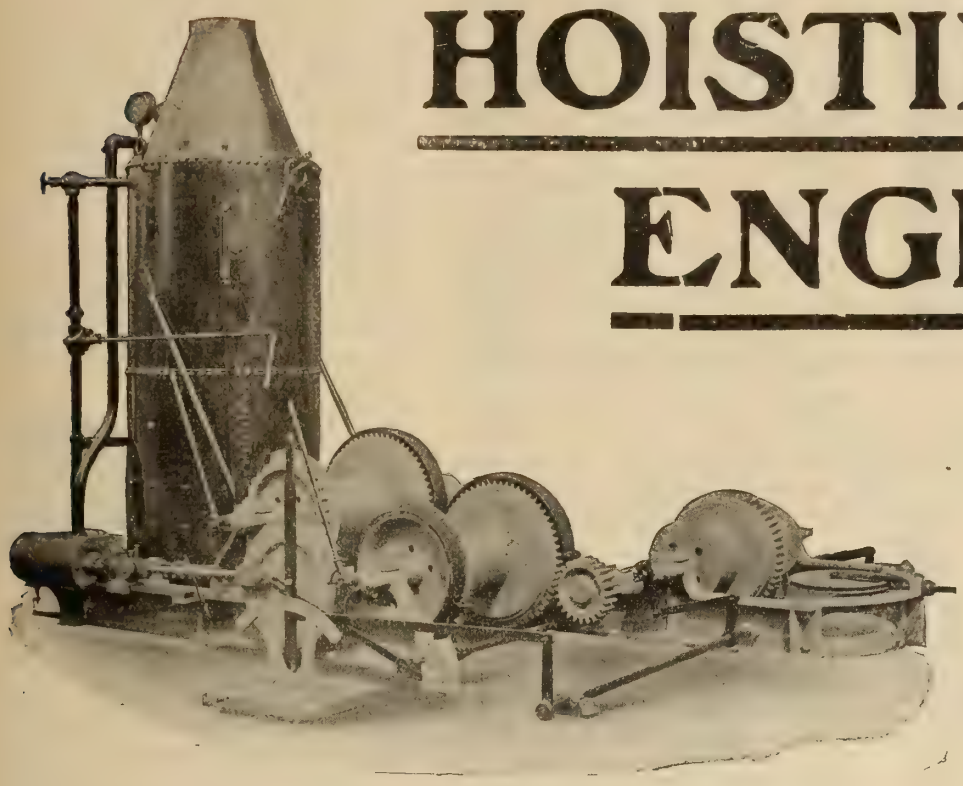

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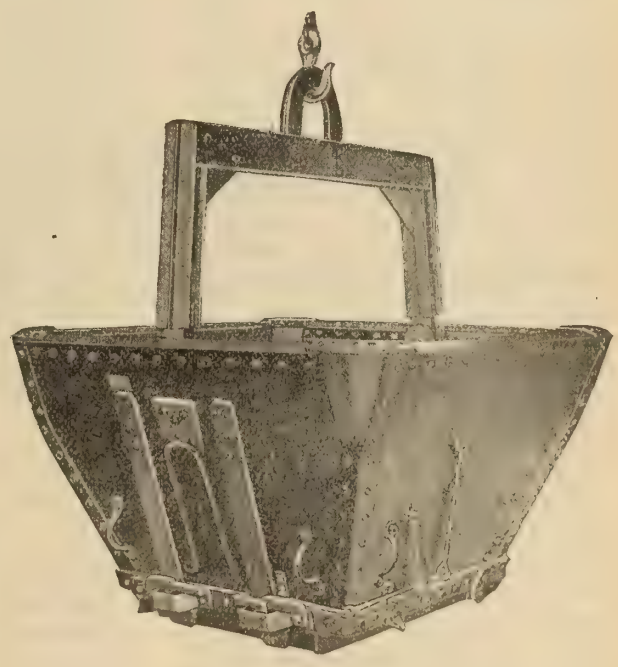

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MONTREAL

Hall has been applied for.—Tenders are invited for carpentry for store and dwelling. Plans at 64 Queen street east.—The Bank of Commerce intend building on the north-west corner King and Jarvis street. — The Dominion Bank intend erecting a building, south-east corner Sumach and King streets.—The Sovereign Bank have purchased the site, north-west corner King and George streets, for a new bank building.—The following asphalt pavements have been recommended by the City Engineer: Mutual street, from Gould to Gerrard, $3,905; McGill street, from Yonge to Mutual, $7,265; Mutual street, from Queen to Wilton avenue, $8,814; Christie street, from Bloor to C.P.R., $22,156; vitrified block pavement on Frederick street, from Front to King, cost $2,707; macadam roadway on Dupont street, from Christie 700 feet west, to cost $3,343.—Building permits have been issued as follows: H. Pennock, 2-story and attic brick veneer dwelling, Bellwoods avenue, near Robinson street, cost $2,000; F. Norfolk, 2-story brick dwelling, Rudcliffe street, cost $2,500; W. J. Clokey, 2½-story brick dwelling, 66 Beatty avenue, cost $4,000; W. Roberts, pair 2-story brick dwellings, Shaw street, near Bloor, cost $4,500; Elder Carriage Co., 3-story brick and stone factory, corner Soho and Phoebe streets, cost $9,000; Alexander Theatre Co., brick theatre, King street, near Duncan, cost $150,000; C. Turp, 1-story iron and glass green houses, 1549 Bloor street, cost $2,000; W. J. Cook, alterations to hotel, corner Queen and Esther streets, cost $4,500; J. J. Walsh, pair 2½-story stone and brick dwellings, Dowling avenue, near Queen street, cost $7,000; Mrs. M. Williams, 2½-story brick dwelling, 176 Gladstone avenue, cost $2,500; Canadian Northern Railway Co., 1-story corrugated iron freight house, corner Cherry and Front streets, cost $5,000; Sharples Separator Co, 1-story brick factory, corner Vincent and Dundas streets, cost $15,000; J. J. Walsh, pair 2½-story brick dwellings, 1373-5 King street west, cost $8,000; T. Holmes, 7 pair 2-story brick dwellings, corner Howland avenue, and Wells street, cost $17,000; J. J. Walsh, 2½-story brick dwelling, 1377 King street west, cost $4,000; S. B. Coon, 2½-story brick dwelling, Roxborough street, near Molson, cost $7,000; M. Kellow, 2-story and attic brick dwelling, 181 Albany avenue, cost $3,500; M. Leslie, 2-story brick store and dwelling, corner Bloor street and Emerson avenue, cost $3,500; Deeth & Sons, six 2-story brick dwellings, 2-12 Montrose avenue, cost $12,000; Aura Lee Athletic Club, 2-story brick club house, corner Avenue road and Roxborough avenue, cost $2,200; W. G. Chisholm, pair 2-story and attic brick dwellings, 2 and 4 Concord avenue, cost $5,500; W. W. Hiltz, two pair 2-story brick dwellings, Woolfrey avenue, near Bowden street, cost $8,000; J. Pierce, pair 2-story and attic brick dwellings, Havelock street, cost $6,000; Trustees of Knox church, 1-story brick church, Spadina avenue, near Harbord street, cost $110,000; R. C. Evans, 1-story brick church, 21 Soho street, cost $10,000; Geo. Martin, pair 2-story brick dwellings, Dovercourt road, near Bloor street, cost $4,000; J. W. De Laney, 2-story brick veneer dwelling, 287 Jones avenue, cost $2,500; A. Horton, three 2-story and attic brick dwellings, 96-100 Howard street, cost $8,500; Fred S. Duff, pair 2½-story brick dwellings, 104-106 Beatrice street, cost $5,500; Consumers' Gas Co., 1-story brick and steel coke shed, Booth avenue, cost $50,000; T. L. Holmes, 2½-story brick dwelling, Montrose avenue, cost $2,800; D. McConkey, 2-story brick dwelling, 182 Arthur street, cost $2,600; H. Hutson, pair 2-story and attic brick dwellings, Palmerston avenue, cost $8,000; James Falconer, 2-story roughcast dwelling, brick front, St. Clarens avenue, near Bloor street, cost $2,000; Mrs. W. H. Knox, three 2-story and attic frame dwellings, Waverley road, cost $6,000; W. O. McTaggart, three pair 2-story roughcast dwellings, brick fronts, 157-159 Westmoreland avenue, cost $9,000; William Neilson, 2-story brick factory and stable, Gladstone avenue near College street, cost $15,000; H. Hutson, 2-story detached brick store, College street, near Delaware avenue, cost $3,000, T. G. Crown, 2-story brick dwelling, 1208 Yonge street, cost $3,000; O. G. Niemier, 2-story brick store and dwelling, corner Franklin and Royce avenues, cost $3,500; George Irwin 2-story and attic brick dwelling, 48 Concord avenue, cost $3,000; John H. Young, three pair 2-story brick dwellings, corner St. Albans and St. Vincent streets, cost $9,000; A. Mackie, Sr., 2-story brick veneer dwelling, Jones avenue, cost $1,500; Fred S. Duff, pair 2½-story brick dwellings, 42-44 Beatrice street, cost $5,500.

CONTRACTS AWARDED.

WINNIPEG, MAN. — Enlarging St. John's Methodist Church: Joseph Nixon, contractor.

SOURIS, MAN. — Erection of new Methodist church: Souris Construction Co., $16,400.

ST. BONIFACE, MAN.—Construction of creosote pavement: John T. Smith, Minneapolis, contractor.

BERLIN, ONT.— Passenger elevator in the building of Smyth Bros.: Parkin Elevator Co., contractors.

GUELPH, ONT.—Construction of new stand pipe at the O. A. College: Walkerville Bridge Co., cost $5,000.

NANAIMO, B. C.—Erection of a corrugated iron warehouse for Pearson & Co.: Chester Young, contractor.

BEDFORD, QUE.—Kelsey system of heating in the R. C. school: James Smart Mfg. Co., Brockville, contractors.

BRANTFORD, ONT.—Freight elevator and building of Ham & Nott: Parkin Elevator Co., Hamilton, contractors.

SYDNEY, N.S.—Store and residence, corner Victoria road and Ferris street for G. Buffett: A Cameron, contractor.

TOTTENHAM, ONT.—Kelsey system of heating in the Episcopal church; James Smart Mfg. Co., Brockville, contractors.

COBOURG, ONT.—Two freight elevators in the factory of John Dick & Son, Parkin Elevator Co., Hamilton, contracts.

LONDON, ONT.—Additions to Chesley avenue public school: R. G. Wilson, contractor, cost $7,475. G. Craddock, architect.

METZ, ONT.—Kelsey system of warming and ventilating in Presbyterian church: James Smart Mfg. Co., Brockville, contractors.

OTTAWA, ONT.—One passenger and one freight elevator for Thornton & Truman: Parkin Elevator Co., Hamilton, contractors.

SOUTHAMPTON, ONT.—One passenger and one freiget elevator in the building of S. M. Knetchel: Parkin Elevator Co., contractors.

PORT ELGIN, ONT.— Two freight elevators in the building of Stephens, Hepner & Co.: Parkin Elevator Co., Hamilton, contractors.

BROCKVILLE, ONT.—Kelsey system of heating in the Manual Training and Domestic Science school: James Smart Mfg. Co., Brockville, contractors.

NORTH TORONTO, ONT.—Construction of concrete sidewalks: Royal Artificial Stone Paving Co., contractors, 69 cents for running foot of 5 foot width.

DARTMOUTH, N.S.—150 h.p. Fairbanks Morse suction gas producer plant and 10 k.w. alternator for the lighting plant: Canadiau Fairbanks Co., Montreal, contractors.

HAMILTON, ONT.—Construction of foot bridge over G. T. R. at Emerald street: Hamilton Bridge Works Co., cost $2,275.— Freight elevator for Canadian Axminster Carpet Co.: Parkin Elevator Co., contractors.

EDMONTON, ALTA.—Erection of a theatre on Jasper avenue for A. W. Cam-

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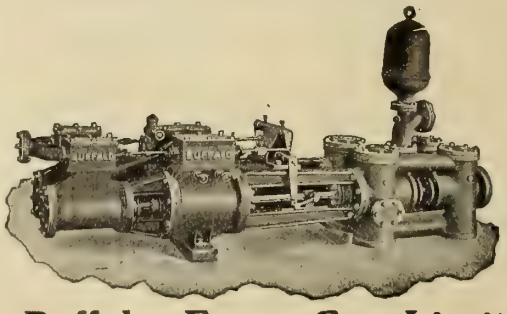

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eron: Killip & Co., contractors.—Erection of G.T.R. bridge here: May, Sharpe Construction Co., Winnipeg, contractors, cost about $250,000.

PORT ARTHUR, ONT.—Supply of 400 tons of asphalt block for paving: Ontario Asphalt Block Co., Windsor, contractors.—Construction of extension to breakwater, (2,000 feet,): M. J. Hogan, Montreal, contractor, cost about $375,000.

ST. JOHN, N. B.—For improvements to the east end ferry house, the following tenders were recommended: Plumbing and heating, R. E. Fitzgerald, $1,215; masonry, B. Mooney & Sons, $1,148; painting and glazing, A. G. Staples, $120; carpenter work, Andrew Myles, $250.

DALHOUSIE, N. B.—Construction of waterworks: Mann, & Baxter, Campbellton, N. B., $37,500. Other tenders were John F. Counolly, Toronto, $43,800; Chater Bros., Monkton, $48,400. W. E. Douglass, resident engineer; Willis Chipman, Toronto, consulting engineer.

WALKERVILLE, ONT.—Erection of business block corner Wyandotte street and Devonshire road, for Walkerville Land & Building Co.: Victor Williamson, contractor. Albert Kahn, Detroit, architect.—Erection of store on Wyandotte street for A. D. Bowlby: Victor Williamson contractor.

WELLAND, ONT.—Erection of residence on Jane street for J. Phelps: carpenter work, Mr. Baumhaufer; masonry, Mr. Vanderburgh; plumbing, Griffiths & Grass,—Erection of fifty houses for the employees of the steel works: Welland Construction Co., contractors, cost about $100,000.

MONTRFAL, QUE. — Erection of cement works at Longue Pointe for the Lakefield Portland Cement Co.: J. J. Wilson, contractor.—Erection of a three-story apartment on St. Mark street for

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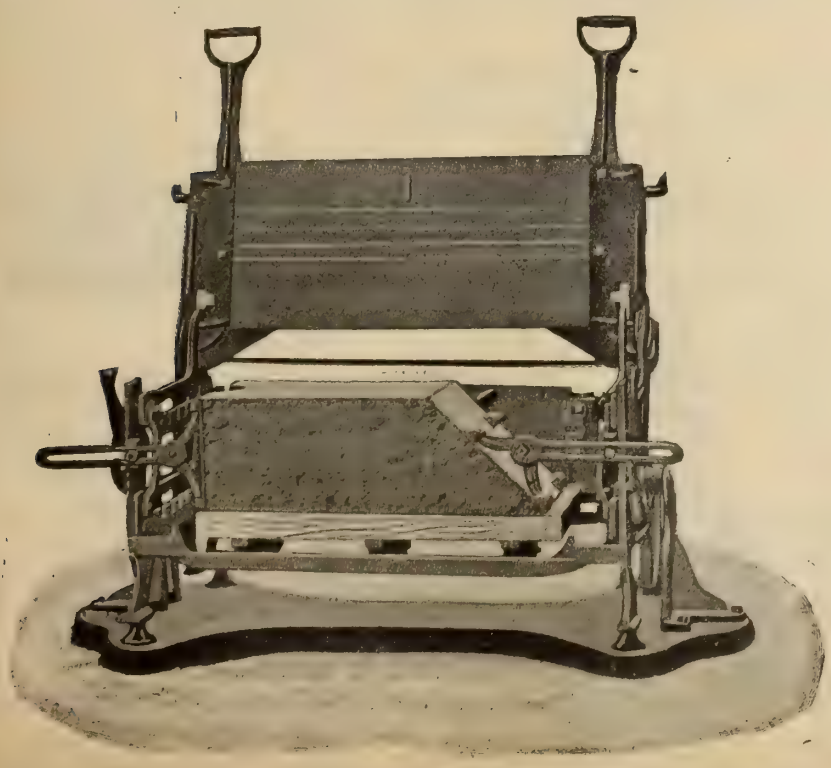

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Mrs. H. S. Phillips: woodwork, Beckham & Scott; masonry, De la Durantaye & Son; plumbing, E. Lesperance; painting, etc., C. Soane. 55 Richmond compound consolidation engines: Locomotive & Machine Co., contractors.— Erection of new theatre for C. B. Bennett, corner St. Catherine and City Councillor streets: E. E. Horn, New York, contractor. C. E. Horn, architect, New York, and Lacroix & Piche, Montreal, structural engineers.

TORONTO, ONT. — One passenger and one freight elevator in the Cohen hotel: Parking Elevator Co, Hamilton, contractors.—The Property Committee of the Board of Education awarded contracts for work on schools as follows:—Riverdale high school—Mason work, H. Lucas & Son, $39,645; carpentry, Frank Armstrong, $11,325; plastering, Dancy Bros., $2,100; painting, T. Barrett, $1,140; plumbing, Fred Armstrong, $1,000; tinsmithing and roofing, A. B. Ormsby Company, $1,693: heat regulators, Johnston Heat Regulating Company, $570. Rosedale school enlargement—J. Berridge, all trades, $18,572. Pembroke street church, building reconstruction for manual training — Carpentering, Frank Armstrong, $932; painting, T. Barrett, $115; heating and ventilating, Pease Foundoy Company, $92; plumbing, Fred Armstrong, $92.

NOTES.

Howard Stapleford, builder, St. Catharines, Ont., has assigned to Robert Fowlie.

The Harvard and Leach Paving Company, of Toronto, have assigned to Mr. E. R. C. Clarkson.

Mr. John Galt, C. E., Toronto, left the city on the 4th inst., for an extended tour through the North West and British Columbia.

The Ideal Concrete Machinery Company, of South Bend, Ind., have received an order from an eastern concern for concrete machinery to the value of $250.000.

The Waterloo Knitting Mills Waterloo, Que., begun the erection of a large new mill in that town. The main building will be 210 by 70 feet, four stories high. There will be besides boiler and engine house, and chimney 110 feet high. Eric Mann, Montreal, is the architect. Proprietor, A. F. Sararia.

Mr. C. B. Smith, chairman of the Temiskaming & Northern Ontario Railway Commission, has retired in order to take charge of Winnipeg's municipal hydraulic power scheme. Mr. Smith will retain his connection with the Railway Commission as consulting engineer, and will continue a member of the Hydro-Electric Power Commission.

Macdonnell & Gzowski, a new contracting firm, have located in the Bank of British North America Building, Vancouver B. C. The firm starts immediately on the large undertaking outlined by the Guggenheim syndicate in Cariboo consisting of the construction of a complete system of canals to provide water at all seasons for the mining properties being developed in the district.

W. Kitchen, of Kingsclear H. Kitchen and I. E. Burden, of Montague Beach, P. E. Island, W. Kitchen and J. H. Barry, K. C., of Fredericton, N. B., have given notice in the Royal Gazette that they will apply for incorporation as the Willard Kitchen Company, Limited. The object is to acquire the plant and continue the contracting business of Willard Kitchen. The amount of the capital stock is to be $150,000.

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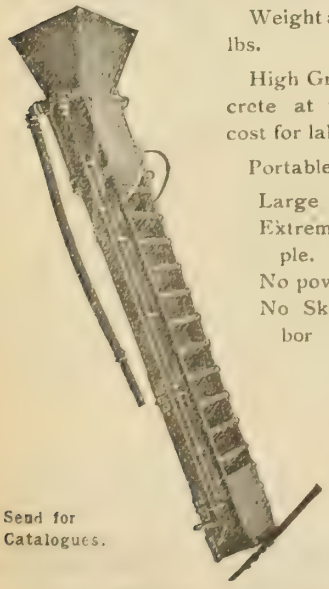

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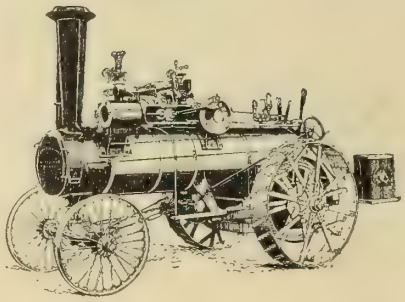

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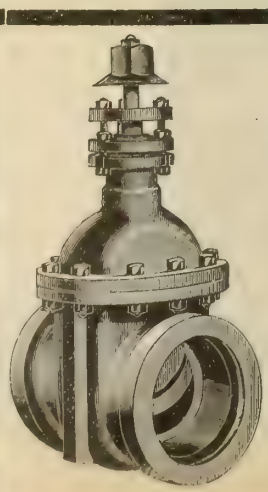

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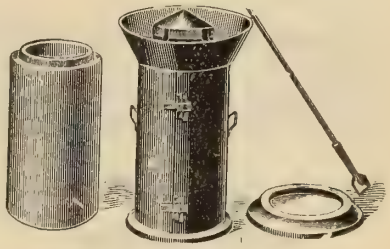

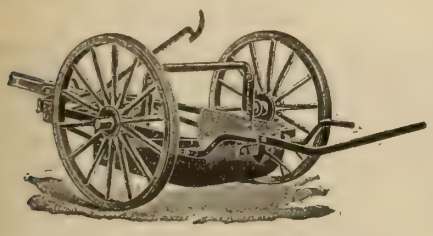

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CLASSIFIED INDEX OF ADVERTISERS

ACCIDENT INSURANCE
Page
Ontario Accident Insurance Co. 19

BLUE PRINTS
Electric Blue Print Co. 7

BLOWERS
Buffalo Forge Co. 4

BRIDGES (CONCRETE)
Steel Concrete Co. 15

BRIDGES (STEEL)
Canadian Bridge Co. 19
Canada Foundry Co. 23
Dominion Bridge Co. 15
Jenks & Dresser 16
Phoenix Bridge and Iron Works 15

CEMENT
Alsen Portland Cement Co. 9
Bremner, Alex 6
Currie & Co., W. & F. P. 13
DeSola, C. I 7
Gray & Bruce Portland Cement Co. 21
Hyde & Co., F 22
Hanover Portland Cement Co 19
Lakefield Portland Cement Co. 14
McNally & Co., W. 7
Morrison & Co., T. A. 13
Morgan, T. M. 15
National Portland Cement Co. 20
Owen Sound Portland Cement Co. 7
Ontario Portland Cement Co. 16
Raven Lake Portland Cement Co. 13
Stinson-Reeb Builders' Supply Co. 17
Toronto Pottery Co. 22
Thorn Cement Co. 14

CONCRETE MIXERS AND MACHINERY
Dartnell, E. F. 6
Hopkins & Co., F. H. 24
Ideal Concrete Machinery Co. 18
Mussen & Co., W. H. C. 3
Morrison & Co., T. A. 13
Toronto Pressed Steel Co. 7
Vining Bros. Mfg. Co. 5

CONTRACTORS' PLANT
Beatty & Sons, M. 22
Harris Co., J. W.
Hopkins & Co., F. H. 24
Locomotive & Machine Co. 15
Mussen & Co., W. H. C. 3
Peat & Sons, James 14
Toronto Pressed Steel Co. 7

CONCRETE CONSTRUCTION
Ambursen Hydraulic Construction Co. 7
Loignon, A. & E. 7
Steel Concrete Co. 15

CONTRACTORS' EMPLOYMENT BUREAUS
Bryans & Co., E. E. 7
Zarossi, Banco 15

CORRUGATED IRON
Metallic Roofing Co. 5
Pedlar People 22

CRUSHERS (STONE AND ROCK)
Allis-Chalmers-Bullock 11
Beatty & Sons, M. 22
Dartnell, E. F. 6
Hopkins & Co., F. H. 24
Mussen & Co., W. H. C. 3
Morrison & Co., T. A. 13

DEBENTURES
Nay, Anderson & Co. 22
Stimson & Co., G. A. 21

DRILLING CONTRACTORS
Page
Harvey, J. 13
Peat & Sons, James 14

ENGINEERS AND CONTRACTORS
British Columbia General Contract Co. 23
Canadian White Co. 20

ENGINEERS (CIVIL)
Archibald, George H. 15
Chipman, Willis 17
Connor, Clarke & Monds 17
Davidson, Shirley 21
Davis, Johnston 15
Fielding, John S. 7, 8, 17
Galt, John 7
Jackson, John H. 17
Lea & Coffin 17
Leofred, A. 21
McConnell, Brian D. 13
McDougall & McRae 7
Parke, Roderick J. 17
Scott, Wm. Fry 21
Simpson, T. T. 21

ENGINEERS (MECHANICAL)
Farmer, John T. 21
Galt, John 7

ENGINES
Cameron & Co., Hugh 16
Sawyer & Massey Co. 6

ELECTRICAL APPARATUS AND SUPPLIES
Allis-Chalmers-Bullock 11
Drummond, McCall & Co 14
Northern Electric & Mfg. Co. 4

FIRE APPARATUS
Cameron & Co., Hugh 16
Meadows, George B., Toronto Wire, Iron & Brass Works Co. 9
McGregor & McIntyre 16
Seagrave, W. E., Walkerville, Ont. 16

HOISTING MACHINERY
Allis-Chalmers-Bullock 11
Beatty & Sons, M. 22
Hood & Sons, Wm 19
Hopkins & Co., F. H. 24
Mussen & Co., W. H. C. 3

HYDRANTS
Canada Foundry Co. 22
Canadian Fairbanks Co. 13
Gartshore-Thompson Pipe & Foundry Co. 9
Kerr Engine Co. 8
Montreal Pipe Foundry Co. 9
McDougall Co., R. 21

LOCOMOTIVES AND RAILS
Gartshore, John J. 19
Locomotive & Machine Co. 15
Sessenwein Bros. 7

PILE DRIVING
Hood & Sons, Wm. 19
Russell, John E. 19

PAVING AND PAVING MATERIALS
Brunet, Joseph 17
Forest City Paving Co. 17
Nash Road 13
Ontario Asphalt Block Co. 17
Silica Barytic Stone Co. of Ontario 15
Warren Bituminous Paving Co. 7

PIPE (WOODEN)
Canadian Pipe Co. 9
Pacific Coast Pipe Co. 13

PIPE (CONCRETE)
Page
Dominion Concrete Co. 6

PUMPS AND PUMPING MACHINERY
Allis-Chalmers-Bullock 11
Canadian Buffalo Forge Co. 5
Canadian Fairbanks Co. 13
Canada Foundry Co. 23
Drummond, McCall & Co 14
McDougall Caledonian Iron Works Co., John 19

PIPE (CAST IRON)
Canada Foundry Co. 23
Gartshore-Thomson Pipe and Foundry Co. 9
Gaudry & Co., L. H. 7
Montreal Pipe Foundry Co. 9

ROAD MACHINERY
Cameron & Co., Hugh 16
Climax Road Machine Co. 7
Heaman, George 23
Morrison & Co., T. A. 13
Sawyer & Massey Co. 6

ROPE
Allan, Whyte & Co. 21
Greening Wire Co., B. 21

SECURITY BONDS
United States Fidelity & Guaranty Co. 21

STEEL BARS (CORRUGATED)
Corrugated Steel Bar Co. of Canada 16

STRUCTURAL IRON AND STEEL
Canada Foundry Co. 23
Dominion Bridge Co. 15
Jenks & Dresser 16
Locomotive & Machine Co. 15
McGregor & McIntyre 16
Phoenix Bridge & Iron Works 15

STONE
Crushed Stone, Limited 16
Doolittle & Wilcox 21

SHOVELS (STEAM)
Allis-Chalmers-Bullock 11
Beatty & Sons, M. 22
Locomotive & Machine Co. 15

SEWER PIPE
Bremner, Alex. 6
Canadian Sewer Pipe Co. 17
Dominion Concrete Co. 6
Dominion Sewer Pipe Co. 14
Toronto Pottery Co. 22

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Canadian Shovel & Tool Co. 5

TELEPHONE SUPPLIES
Northern Electric & Mfg. Co. 4

TANKS AND STAND PIPES
Canada Foundry Co. 23
Ontario Wind Engine & Pump Co. 17

VALVES
Canada Foundry Co. 23
Canadian Fairbanks Co. 13
Gartshore-Thomson Pipe & Foundry Co. 9
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NECAXA DAM	(shipping instructions so far 60,000 bbls.) approximate amount	175,000 bbls.	GOVMT. ORDER SOUTH AMERICA	150,000 bbls.
XOCHIMILCO WATER WKS., MEX.	approximate	200,000 bbls.	RIO DE JANEIRO, SANTOS, ETC.	40,000 bbls.

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PAVEMENT CONSTRUCTION IN TORONTO*

ASPHALT PAVEMENTS.

During the year 1905 five heavy asphalt pavements and twenty-five light asphalt pavements were constructed. The pavements laid aggregate 17,000 square yards of heavy asphalt, and 54,200 square yards of light asphalt, and a total length of 5.404 miles. The total length of asphalt pavements in the City is now 56.29 miles, or 20.36 per cent. of the total length of paved and unpaved streets in the City.

Last year a table was compiled showing the maximum, minimum and average price of asphalt pavements, from 1901 to 1904 inclusive. Below is found this table brought to date by the addition of the prices that prevailed during 1905:

		Maximum.	Minimum.	Average.
1901	Heavy.	$2.70	$2.30	$2.546/10
"	Light..	2.23	1.82	2.04½
1902	Heavy.	2.60	2.45	2.54
"	Light..	2.15	1.66	2.01¼
1903	Heavy.	2.50	2.14	2.21 3/5
"	Light..	1.88	1.60	1.70
1904	Heavy.	2.30	2.15	2.226/10
"	Light..	1.83	1.53	1.65
1905	Heavy.	2.19	1.99	2.05
"	Light..	1.66	1.36	1.51

This shows a drop of 8 per cent. in the contract cost of heavy asphalt, and 8½ per cent. in that of light asphalt when compared with the prices prevailing in 1904.

The repairing of asphalt pavements, upon which the terms of guarantee have expired, was let by tender, the prices for the year being 89 cents and 82 cents for the heavy and light asphalt surfaces respectively, and $5.34 per cubic yard for concrete foundation. There was expended during the year the sum of $22,600 for asphalt repairs.

Concrete curbing has entirely superseded stone curbing in the construction of asphalt pavements, 41,253 lineal feet of combined concrete curb and gutter, and 7,500 lineal feet of concrete gutter only having been laid during the year 1905. The 5-in. concrete curb is found to be too light a construction to give the necessary stability to the pavement, and it is proposed in future to favor more largely the use of 6-in. curbing. This will add very little to the cost, and much to the appearance and character of the work.

BRIC PAVEMENTS.

In 1905 brick pavements on streets aggregate 1.633 miles, as compared with 1.402 miles constructed in 1904, and the construction and reconstruction of track allowance aggregated 2.118 miles, as compared with 1.474 miles constructed in 1904. Compared as to area, 41,656 square yards of brick pavement of all kinds was constructed in 1905, and 27,946 square yards in 1904. Of this total area, 10,415 square yards was laid with Canadian vitrified brick, and 31,241 square yards with American vitrified block. In last year's Annual Report I anticipated this preponderance of the American product, and submit that the result is quite justifiable, when the price and quality are compared. At the lowest ruling prices, the Canadian brick required to lay one square yard of pavement cost 94¼ cents, and the American blocks required to lay a similar area cost 97 cents, while the quality of the product, as determined by the product, as determined by the standard abrasion test after 1,000 revolutions and 2,000 revolutions, is represented by the ratio:

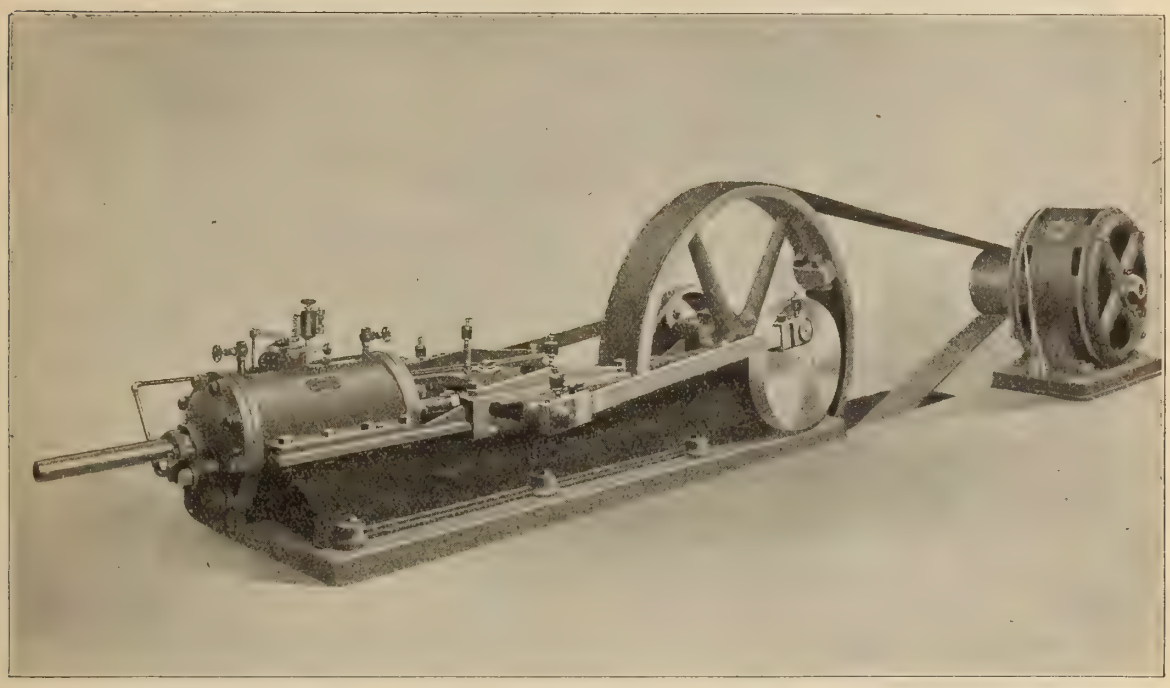
	Per Cen
Canadian (after 1,000 revolutions).....	17.7
American "	11.8
Canadian (after 2,000 revolutions).....	26.2
American "	17.6

To obtain these results, 110 samples of Canadian brick were tested, and 160 samples of American block.

PAVMENT ON WITHROW AVENUE, TORONTO.

*From the Annual Report of the City Engineer for 1985.

"INGERSOLL" COMPRESSORS



One of our 12¼ x 18 "Ingersoll" Air Compressors driven by one of our 50 h. p. Induction Motors and supplying power for a western quarry. Catalogue No. 75 describes and illustrates the different classes of our Air Compressors and the useses to which they are best adapted.

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WINNIPEG : Canada Life Bldg.
TORONTO : McKinnon Bldg.
NELSON : Josephine St.
VANCOUVER : 416 Seymour St.

The track allowance construction during the year shows .924 miles of new vitrified block construction, 1.194 miles of vitrified block reconstruction, and .600 miles of scoria block reconstruction, or a total of 2.718 miles of all kinds, as compared with 2.485 miles constructed in 1904.

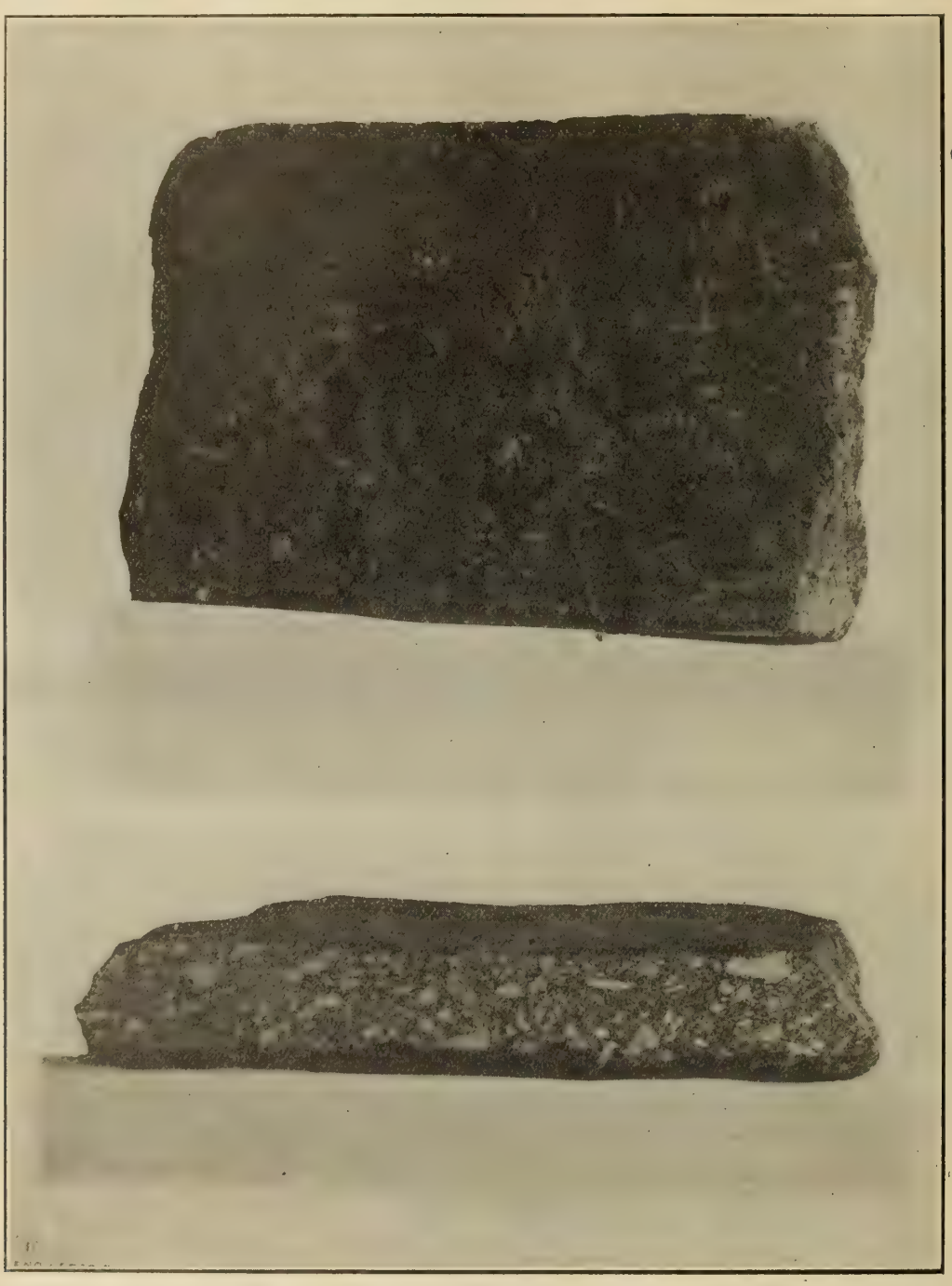
In constructing brick pavements during the year 13,690 lineal feet of concrete curb, and 1,788 lineal feet of stone curb was placed.

CEDAR BLOCK PAVEMENTS.

It is gratifying to be able to note that the increase in the mileage of cedar block pavements on sand is very small; .630 miles, as compared with .511 miles laid in 1904, while in 1900, 7.842 miles of this class of pavement was laid. On sections of two streets, cedar blocks on a concrete foundation was the class of pavement constructed, the blocks in one case being blinded with gravel, and the other case with heated gravel saturated with a mixture of one part of coal tar to two parts of pitch, added at a temperature of 275 degrees Fahrenheit. Half a mile of this class of pavement was constructed.

In connection with cedar block paving, 2,216 lineal feet of concrete curb, 5,513 lineal feet of stone curb and 3,361 lineal feet of wooden curb was constructed.

Last year certain changes were proposed, and during the past year carried into effect, whereby it was hoped that the life of tar macadam pavements might be prolonged. It was sought to select such sizes of broken stone for the wearing surface as would contain the least possible percentage of voids and yet permit of reasonable cheap construction. The period of maintenance guaranteed was extended from one year to three years, and it was predicted that the changes made would result in a pavement on which this period could be extended to five years. In the light of last year's experience, it is now considered safe to give this prediction effect, and accordingly specifications governing the construction of tar macadam pavements will hereafter provide for a five-year guarantee.



TAR MACADAM.

Great difficulty was experienced in obtaining tar and pitch of a uniform consistency. It was found to vary greatly, even in small shipments, so much so as to require constant watchfulness, and frequent changes in the proportions used. To obviate this difficulty, manufacturers of refined tar were approached with a view to the production of a product that had the required consistency without the necessity of

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Stone Crushers and Grinders
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Hydrants — Valves
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for all purposes

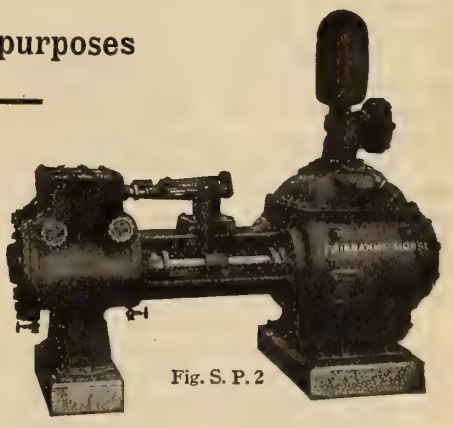

Fig. S. P. 2

The **Canadian Fairbanks Co.,** Limited
MONTREAL TORONTO WINNIPEG VANCOUVER

"RAVEN" PORTLAND CEMENT
— Unexcelled for Strength and Uniformity —
RAVEN LAKE PORTLAND CEMENT CO.
Limited
Long Distance Telephone: RAVEN LAKE, ONT. Telegraph and Post Office Address: VICTORIA ROAD, ONT

mixing tar and pitch to obtain such, with its attendant complicated laboratory tests, during the construction of the work. Two manufacturers have assured us that this is quite possible, and are prepared to supply all our requirements at an advance in cost on semi-refined tar of only the cost of package.

The length of tar macadam pavements constructed during 1905 was 1.257, as compared with .920 miles constructed during 1904.

Included in the above mileage is a pavement which was called bituminous macadam. This is merely a more expensive tar macadam, carrying a ten-year guarantee for maintenance. Its construction was in all respects similar to that of tar macadam, except that the foundation course was blinded with finely broken stone and sprinkled with a mixture of tar and pitch similar to that used in the wearing surface, and greater care was taken in the selection and proportions of the various sizes of stone. For the wearing surface, of the mineral aggregate:

(1) 30 per cent. was such as would pass a No. 40 sieve.

(2) 12 per cent. was such as would be held on a No. 40 sieve, and pass a No. 8 sieve.

(3) 10 per cent. was such as would be held on a No. 8 sieve, and pass a No. 4 sieve.

(4) 18 per cent. was such as would be held on a No. 4 sieve, and pass a ½-in. sieve.

(5) 30 per cent. was such as would be held on a ½-inch sieve, and pass a ¾-sieve.

Combined concrete curb and gutter, similar to that used in the construction of asphalt pavements, was tried for the first time last year in connection with tar macadam pavements, and was found satisfactory. This form of gutter will hereafter largely replace brick which has heretofore been used. While the extremely low prices prevail for asphalt pavement, which carries a ten-year guarantee, the construction of tar macadam will be discouraged as much as possible.

In connection with tar macadam pavement, there was constructed during the year 1905, 6,048 lineal feet of combined concrete curb and gutter, 910 lineal feet of stone curb, and 1,785 lineal feet of concrete curb only.

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St. John Pulp & Paper Company, Limited, St. John, N. B., incorporated, captital $275,000. Directors, G. McAvity and H. N. Stetson, St. John, N. B.; G. C. Cutler, and F. B. Cutler, Boston, Mass., and J. L. Cutler, New York.

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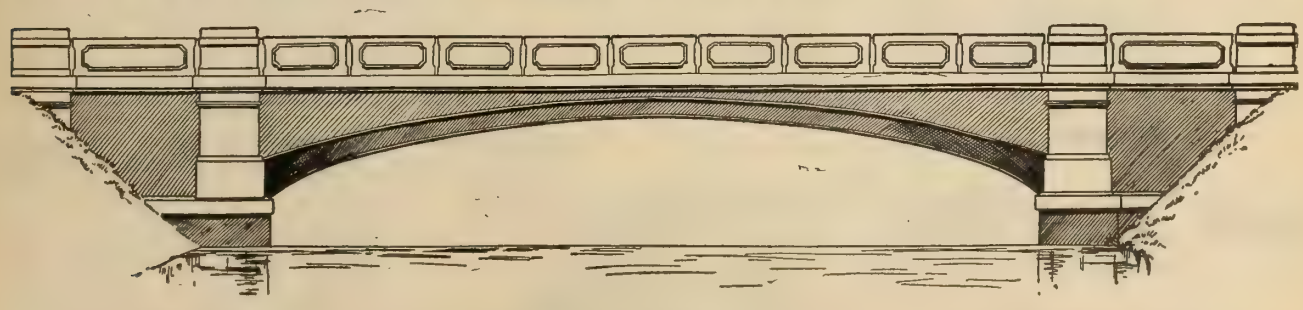

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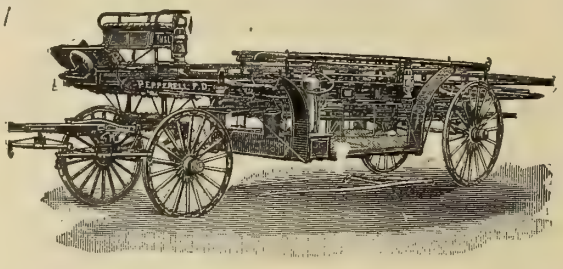
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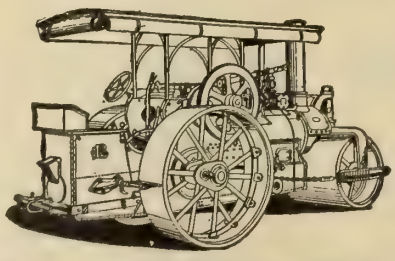
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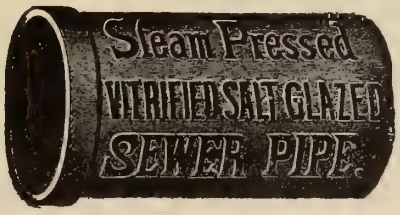

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The cableway was anchored to two piles on each bank of the stream, with a third pile at each anchorage to guide it. At the time the laying was done the width of the river had been reduced to 100 feet, so that eight 12 foot lengths of pipe with the ball-and-socket joints were enough to cross it. The alternate joints were made with ball and socket. A lead joint between two lengths of pipe was first made and half of a ball-and-socket joint attached to each end of this two-length section. This section was then swung in chains rove in blocks on the cableway and hauled across the river. It was then lowered

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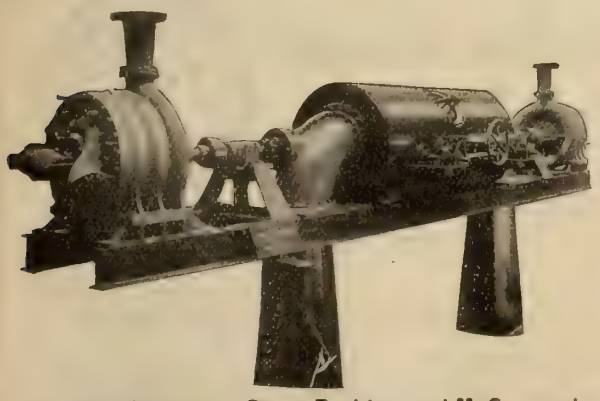

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nearly to position on the bottom of the river between two barges held 8 feet apart, one upstream and one downstream from the trench, and its weight transferred to these barges. A second two-length section was then made, and its weight also transferred to the barges after the ball-and-socket joint between the two sections had been made. A third two-length section after being run out and lowered was suspended on the cableway while the fourth and last two-length section was held by a derrick on the bank. When the joints had been inspected, the trench was cleaned out and the eight joined lengths lowered simultaneously with chains in the blocks from which they were supported. One of the eight-length sections was held above the water by a cable and the other by a derrick until connections could be made with the pipe line on each side of the river. The ball and socket joints had to be lowered about 9 in. afterward by a diver.

BUILDING IN GUELPH.

Building activities in Guelph this year are far in advance of any period in the history of the city. The aggregate value of public buildings, factories, etc., amounts to $249,000, and of residences, etc., $245,700, making a total of $494,-700. There has been a great improvement in the character of the houses erected. The estimated cost ranges from $1,500 to $5,000. Very few frame or plastered buildings have been erected. Pressed brick has been much used, displacing ordinary brick and even stone. Cement and artificial stone have rivalled Guelph stone for finishing buildings.

In connection with the Ontario Agricultural College a Mechanical building has been erected. It is a two story and basement brick structure 60 by 160 feet, costing $40,000. A two story white brick addition has been built to the Chemical building at a cost of $12,-000. A new series of green houses has been erected, costing $5,000.

The Crowe Iron Works have erected a modern factory building, including moulding shop, power building and finishing room, the cost of which is estimated at $28,-000. W. A. Mahoney was the architect of this work. The same architect also designed the alterations of the Tovell block for the Royal Bank offices, the cost being $5,000. Mr. Mahoney planned the additions to the Massey-Harris Co. building on West Market square for H. N. Norrish, the estimated cost being $9,000.

The new Homewood Sanitarium building, a large stone structure on Delhi street, has had work to the value of $50,000 done this year. On the new Armouries, this year, work to the value of $40,000 has been done. The Guelph Carpet Mills propose erecting a new weaving shed this fall, to cost $12,000.

The partnership of Sword & Ludgate, lumber contractors, Parry Sound, Ont., has been dissolved.

Amongst the papers read at the recent convention of the American Society of Municipal Improvement in Birmingham, Ala., was one on "Municipal Asphalt Plant of Hamilton," by Mr. E. S. Barrows, City Engineer, Hamilton, Ont.

Mr. Robert Surtees, formerly city engineer of Ottawa, Ont., died at his residence on McLaren street, in that city, on September 30th. He was seventy-one years of age and had held the position of city engineer for over twenty five years, and later became engineer to the Ottawa Improvement Commission.

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							Neat.					3 (Sand) to 1 (Cement)				
					Initial	Final	1 dy.	7 dys.	28 dys.	3 mos.	1 yr.	1 dy.	7 dys.	28 dys.	3 mos.	1 yr.
1903	20	O.K.	3.135	2.1	162	345	307	701	783	827	*	74	214	299	367	*
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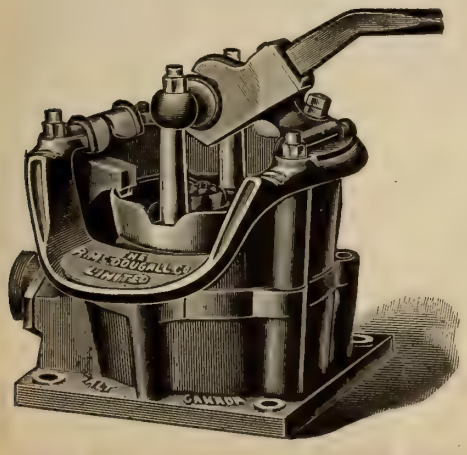

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For Contractors' Use.—This class of pump will handle about anything that is wet and their usefulness has been shown in thousands of cases. We try always to have a few on hand for Emergency orders, also extra Diaphragms and 3" Suction Hose and Fittings.

Try us once if in a hurry or even if you have lots of time.

We also Supply

Manhole Covers and Frames,
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GALT, CANADA.

Prices of Building Material

PRESSED BRICK, Per M.

TORONTO PRESSED BRICK AND TERRA COTTA WORK

	F.O.B. Milton, Ont.
Red No. 1	$13 00
" 2	11 50
" 3	10 00
Buff No. 1	17 00
" 2	13 00
Brown	25 00
Roman Red	30 00
" Buff	35 00
" Brown	4[illegible] 00
Hard Building	8 0
" Sewer	8 00
" Backing	7 00

Moulded Ornamental from $2.00 to $5.00 per 100.
Terra Cotta string Courses and Frieze, from 50c. to $2.00 per ft. run.
Roofing Tiles, $20.00 per 1,000.

DON VALLEY BRICK WORKS.

Nos. 1, and 2, Red Pressed Bricks
Nos. 1 and 2 Buff Pressed Brick
No. 1 Brown Pressed Brick
Pompeiian Red, Buff and Brown Pressed Bricks
Ornamental Bricks of all kinds for Mantel purposes
Enameled Bricks of all Colors
Porous Terra Cotta Fireproofing of all Descriptions
Vitrified Street-Paving Bricks
Semi-Vitrified Foundation Bricks
Common Stock Red and Grey Bricks
Sewer Bricks
Stone or Macadamized Roadways

Please write to head office, 34 Toronto St. Toronto, for catalogue and prices.

BEAMSVILLE BRICK AND TERRA COTTA CO.

	F.O.B. Beamsville.
Red Peerless Facing	$16 00
" No. 1	14 00
" No. 2	12 00
" No. 3	10 00
Brown Peerless Facing	20 00
" No. 1	18 00
Buff Peerless	20 00
" No. 1	18 00
" No. 2	15 00
Moulded and Ornamental Brick from $3 to $10 per C	
Roman Red (Size 12 x 4 x 1½ in.)	30 00
" Buff " "	30 00
" Brown " "	35 00
Vitrified Paving Brick No. 1	18 00
" " " No. 2	15 00
Sewer	8 00
Roofing Tile	22 00

LUMBER

CAR OR CARGO LOTS, F.O.B. TORONTO.

	Per M. Ft.	
1 inch No. 1 Pine cuts and better	$49.00 to	$51.00
1½ to 2 inch No. 1 cuts and better	53.00	55.00
1 inch No. 3, Pine cuts and better	38.00	40.00
1½ to 2 inch No. 3 cuts and better	40.00	42.00
1 inch Pine Dressing and better shorts	24.00	26.00
1 x 4, 6 and 8 Common	20.00	21.00
1 x 10 and 12 Common	21.00	24.00
1 inch mill run sidings	21.00	22.00
1 inch mill run	21.00	22.00
1 x 10 and 12 mill culls	17.00	18.00
1 inch dead cull sidings	12.00	13.00
1½ inch Flooring	27.00	28.00
Hemlock, 1 x 4 to 8 inch	16.00	17.00
2 x 4 to 8 inch, 12 to 16 feet	17.00	18.00
2 x 4 to 10 inch, 18 feet	18.00	19.00
1½ inch No. 1 4 ft. Pine Lath	4.50	5.00
1½ inch No. 2 4 ft. Lath	3.40	3.50
1½ inch No. 1 4 ft. Hemlock Lath		3.50
XXXX Pine Shingles	2.90	3.00
XX Cedar Shingles	2.25	2.30
B.C. Shingles:		
XXX 6 butts to 2 inch		3.15
XXXX 6 to 23-16 inch		3.37
XXXXX 5 to 2 inch		3.70

HARDWOODS—PER M. FEET CAR LOTS.

Ash, white, 1sts and 2nds, 1 to 2 inch	$33.00 to	$35.00
Ash, black, 1sts and 2nds, 1 to 1½ inch	28.00	30.00
Birch, M. R. 1 inch	22.00	24.00
" 1½ inch to 2	23.00	25.00
Basswood, Common and better, 1 to 1¼ inch	23.00	24 00
Basswood, 1½ to 2 inch	24.00	26.00
Elm, soft, mill run, 1 to 1½ in.	23.00	24.00
Elm, rock, mill run, 1 to 1½ in.	23.00	25.00
Maple, common and better, 1 to 1½ inch	22.00	23.00
Oak red plain, 1sts and 2nds, 2 to 4 inch	44.00	46.00
Oak, white, 1sts and 2nds, 1 to 1½ inch	42.00	44 00
Oak, quartered, 1sts and 2nds	70.00	80.00

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We are always open to buy all classes of Manitoba, Saskatchewan and Alberta Debentures.
We are the largest buyers of Western School Debentures in the Dominion of Canada.

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Successors to
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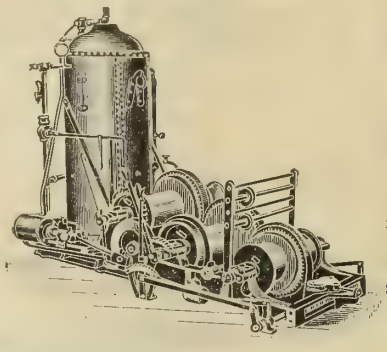

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Mine Hoists, Hoisting Engines
Centrifugal Pumps for Water and Sand
Stone Derricks, Clam Shell Buckets,
Steel Skips, Coal and Concrete Tubs,
and other Contractors' Machinery.

The Toronto Pottery Company, Ltd.

Toronto, Ontario

Manufacturers and Jobbers of

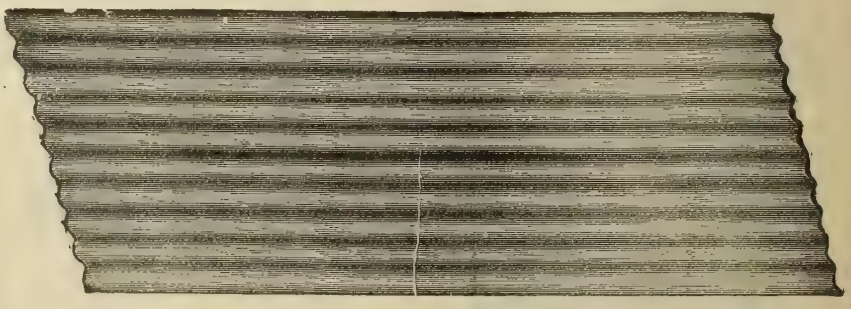
Contractors' Supplies

Fire Brick, Paving Brick, Portland Cement, Sewer Pipe

Write for prices

CORRUGATED IRON

600 TON STOCK. PROMPT DELIVERY.



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TORONTO, ONT.

Head Office and Works,

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CAST IRON PIPE FOR WATER OR GAS

Special Castings,

Tees, Crosses, Flanges Pipe, Valves, Hydrants,

Stand Pipes, Valve Boxes, Drinking and Ornamental Fountains.

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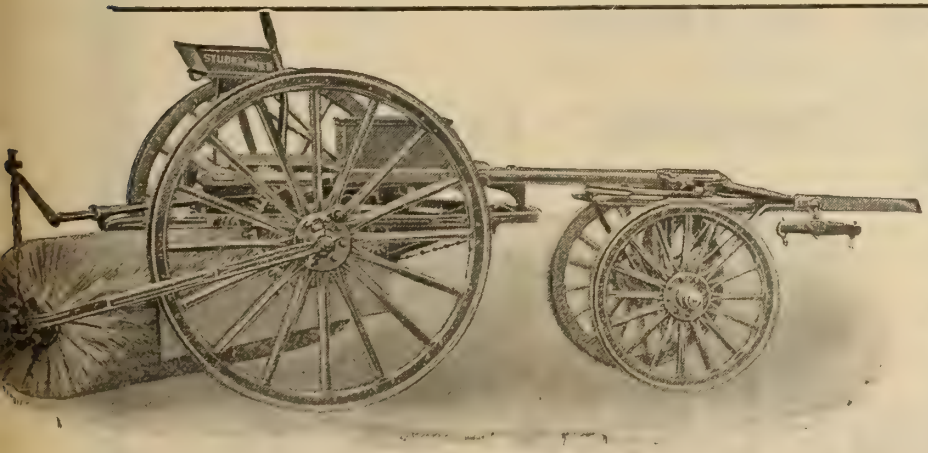

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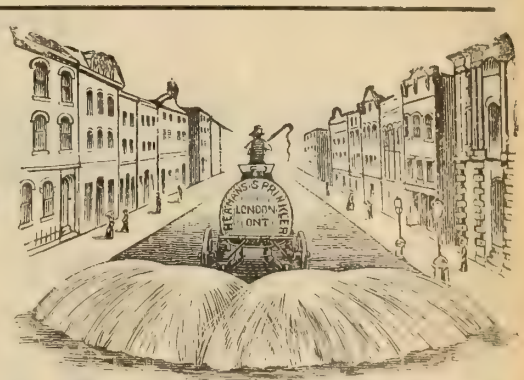
Because no sweeper so effectually does the work for which it is designed as "The Studebaker." It Sweeps Clean. No sweeper is constructed with the same degree of care and mechanical precision. It Wears Well. "The Studebaker" has the smallest number of working parts, and has less gearing than any other sweeper made. It is free from all unnecessary complications. With reasonable care it does not get out of order. Send for complete descriptive catalogue.



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Does not clog or get out of order. Greatest width of spray. Can be graded from driver's seat to any volume.

We also make an . . .

IMPROVED VERTICAL SPRAY

for Pavements

Geo. Heaman, Mnfr., London, Ont.

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Ransome Mixer

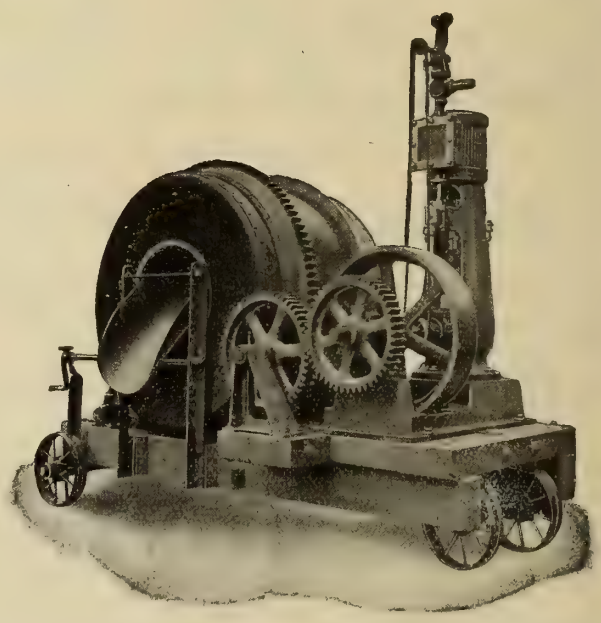
The Concrete turned out is unexcelled for Strength and Uniformity.

Our discharge arrangement will save you $18.00 to $20.00 per week for labor alone.

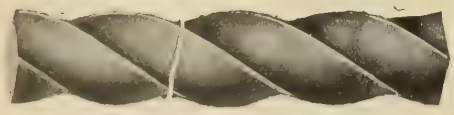
Our machine is inexpensive.

Easy to operate—Efficient and very Simple in Construction.

In a word, it is the most up-to-date Mixer on the market.



Mixers Supplied with or without Power—On Skids or Trucks—All Capacities



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Successors to the Late James Cooper
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Dunn Bros., Winnipeg, Agents
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CANADIAN

CONTRACT RECORD

A Weekly Journal of Engineering, Public Works, Tenders, Advance Information and Municipal Progress

This Paper Reaches Every Week the Town and City Clerks, Town and City Engineers, County Clerks and County Engineers, Leading Civil Engineers and Contractors throughout Canada, and Purchasers of Municipal Debentures.

VOL. 17. TORONTO, MONTREAL — OCTOBER 24, 1906 — WINNIPEG, VANCOUVER No. 34

THE CANADIAN CONTRACT RECORD
PUBLISHED EVERY WEDNESDAY
As an intermediate Edition of the Canadian Architect and Builder.

THE C. H. MORTIMER PUBLISHING COMPANY
of Toronto, Limited,
Subscription Price, $2 per annum, payable in advance.

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TO OUR READERS.

We wish to make the CONTRACT RECORD of the greatest possible value to subscribers, and to that end we ask their co-operation. Each subscriber is requested to consider himself a correspondent of the paper and to send us intelligence regarding proposed works of construction and contracts awarded in his vicinity.

We cannot hope to learn, through our regular channels of information, of all work contemplated throughout this vast Dominion, but by the co-operation of our readers we may more nearly approach the maximum efficiency in the service given.

Correspondence sent to our head office at Toronto or to our branches at Montreal, Winnipeg or Vancouver, will receive due attention and be much appreciated.

TO CONTRACTORS

Separate or bulk tenders addressed to the undersigned (and marked "Tenders") will be received up to 12 o'clock noon 12TH NOVEMBER, 1906, for the several trades work required in the erection and completion of a Collegiate Institute Building in the town of Picton, Ontario. Plans and specifications may be seen at the office of William Newlands, Esq., architect, Kingston, and at the office of the Secretary of High School Board, Picton. Lowest or any tender not necessarily accepted.

T. BOG,
Picton, October 17, 1906. Secretary.

PARTNERSHIP

and excellent opportunity offered young Engineer and Surveyor to join another with wide experience and large connections in best part of Ontario province. Moderate capital needed. Address, 'Radius,' CONTRACT RECORD, Toronto.

Auction Sale of Dredge

The undersigned will offer for sale at their rooms, No. 69 St. James Street, Montreal, on

SATURDAY 3rd NOVEMBER, 1906,

at 11 o'clock a. m.

Dipper Dredge No. 3 belonging to the Harbour Commissioners of Montreal as she now lies damaged in the Commissioners Ship Yard alongside the Mackay Pier, in the Harbour of Montreal.

The dredge may be examined upon application at the Harbour Commissioners' office, No. 57 Common Street.

MARCOTTE BROS.,
Auctioneers.

TOWN OF PRESTON WATER WORKS PUMPING MACHINERY

Tenders will be received by the undersigned up to 6 p. m., MONDAY, NOVEMBER 5TH NEXT, for the supply of Pumping Machinery for the Preston Water Works.

Specifications may be obtained at the office of Davis & Johnston, Engineers, Berlin and Galt. The lowest tender not necessarily accepted.

C. R. HANNING,
Town Clerk.

TOWN OF FORT FRANCES
PROVINCE OF ONTARIO

TENDERS FOR

WATER WORKS AND ELECTRIC LIGHTING

Contract "H"—The supply F. O. B. cars Fort Frances of a 1,000 gallon Underwriter Fire Pump.

Contract "I"—The supply, erection and building in of one 16' x 72" Return Tubular Boiler.

Contract "J"—The supply and erection of a 75 K. W., A. C. Generator with engine direct connected, also all materials and labor necessary for the construction of the Electric Light Distribution System.

Sealed tenders will be received by the Town Clerk, until 8 p. m. on THURSDAY, NOVEMBER 1ST, 1906.

Plans and specifications may be seen and forms of tender obtained at the office of the Town Clerk, or at the head office of the Chief Engineer.

J. C. BARR, Esq., Mayor. W. H. ELLIOTT, Esq., Town Clerk.
JOHN GALT, C. E. & M. E.
Chief Engineer, Toronto.

Proposals For Bridge Superstructure

Sealed proposals addressed to Alderman J. G. Latimer, Chairman, Committee on Works, for erection of steel superstructure for Highway Bridge over the Red River at Redwood avenue, Winnipeg, will be received at the office of the undersigned up to 2.30 p. m. on

TUESDAY, NOVEMBER 20, 1906.

Plans, specifications and forms of proposal may be obtained at the office of Col. H. N. Ruttan, City Engineer, Winnipeg, Canada.

Each bid must be accompanied by an accepted cheque or draft payable to the order of the City Treasurer, or cash deposit for a sum equal to 5 per cent. of the total amount of the bid, which will be subject to forfeiture in case of failure on the part of the contractor to enter into a written contract with approved sureties if called upon to do so.

The City reserves the right to reject any or all tenders or to accept any bid which appears advantageous to the City of Winnipeg.

C. J. BROWN,
City Clerk.

City Clerk's Office, Winnipeg, September 12th, 1906.

CONTRACTS OPEN.

WEST LORNE, ONT.—Tenders are being asked for erection of a rink here. Plans with W. Doyle architect.

WIARTON, ONT.—Siemon Bros. intend erecting another factory building in connection with their works here.

GRAYSON, SASK.—The Evangelical Association have purchased four lots on which a new church will be erected.

VIRDEN, MAN.—The C. N. R. have purchased a site on Nelson street for a new station. Plans are being prepared.

AHUNTSIC, QUE.—Tenders will be received by the Mayor up to October 25 th for purchase of $60,000 five per cent. bonds.

QU'APPELLE, SASK.—The Roman Catholic congregation are considering the erection of a new church building here.

MATHER, MAN.—A by-law will be voted on November 15th to raise $3,000 debentures for the completion of school house.

SARNIA, ONT.—J. R. Mann, Dayton, Ohio, has secured options on a site on the lake for a proposed summer hotel.

ELGIN, MAN.—W. McGraw is interested in the erection of a new opera house for which plans have been prepared.

PORT HOPE, ONT.—The erection of a new hospital building cost about $4,000 is being considered. Dr. Forest is interested.

ST. JEROME, QUE.—E. Marchand will receive tsnders up to November 2nd

for the purchase of 50 debentures of $2,330 each.

DOMINION, N.S.—Engineer O'Dell of the coal Co. will estimate on the cost of bringing water supply for the town from Glace Bay.

GUELPH, ONT.—The City Council have authorized the construction of cement sidewalks on Queen, Palmer and Stuart streets.

SYDNEY MINES, N. S.—D. McDonald will receive tenders up to October 26th for purchase of $11,000 sewerage debentures.

KAMLOOPS, B. C.—J. J. Carment city clerk, has taken tenders for construction of septic tank and excavation of sewer trenches.

REGINA, ALTA.—It is proposed to raise $100,000 for the proposed new Y.M.C.A. building and subscriptions are now being received.

ST. BONIFACE, MAN.—Hooper & Walker, architects, Winnipeg, have taken tenders for erection of a brick and stone school on Norwood street.

NOTRE DAME DE GRACE, QUE.—The Town Council have decided to purchase a site on Sherbrooke street for town hall, fire station, etc.

BARRIE, ONT.—At a recent meeting of the Town Council application was made for a twenty-five year franchise for a street railway, heat and power.

LETHBRIDGE, ALTA.—C.B. Bowman will receive tenders up October 29th for installing heating and ventilating system in the Westminster school.

ATWOOD, ONT.—T. G. Ratcliffe will receive tenders up to November 3rd for construction of the Partridge drain improvement in Elma township.

WALKERVILLE, ONT. —A committee from the Board of Trade will petition the Government for a new building for postal and custom service, etc.

PETERBORO' ONT.—W. G. Morrow will receive tenders up to October 25th for addition to north ward school. Plans with Belcher & Heathcote, architects.

CRANBROOK, B. C.—Plans have been prepared for a new industrial school to be entered at the St. Eugene Catholic mission, near the town, cost between $30,000 and $40,000.

BRANDON, MAN.—McDougall & Ireland, contractors, whose tender for erecting the Collegiate Institute building had been accepted, have been allowed to withdraw their tender.

ALVINSTON, ONT.—Two by-laws will be voted on to loan $6,000 towards establishing a basket and nail keg factory and $3,000 towards the enlargement of E. Warner's woollen mill.

KINGSVILLE, ONT.—The Windsor, Essex and Lake Shore Electric Railway Co. have taken tenders for erection of a power house here. John Piggott & Sons, Windsor, architects.

PICTON, ONT.—T. Bog, secretary H. S. Board, will receive tenders up to November 12th for erection of Collegiate Institute building. Plans with William Newlands, architect, Kingston.

SASKATOON, SASK.— Darling & Pearson, architects, Winnipeg, have completed plans for the Bank of Commerce building, Gothic design, pressed brick and Roman stone, cost $60,000.

HALIFAX, N.S.—The estimated cost of the proposed freestone extension to the county court house is $20,000.— It is announced that a new round house and workshup for the I. C. R. will be erected here.

ST. CHARLES DE BELLECHASE, QUE. — Tenders have been called by the Intercolonial Railway for construction of a new steel superstructure for the bridge over the Boyer river. It is expected that the masonry will have to be repaired likewise.

CHATHAM, N. B.—C. H. La Billois, Department of Public Works, Fredericton, will receive tenders up to November 5th for construction of Cain's Point bridge. Plans at the Department and with Robt. Murray, M. P. P.

VICTORIA, B. C.—Hooper & Watkins, architects, have taken tenders for erection of a five story brick and stone warehouse for Pither & Leiser.—The by-law to provide for a loan for improvements if the waterworks system has been defeated.—The Oak Bay Council are considering an extensive sewerage system in the district.

LONDON, ONT. — The McClary Manufacturing Co., have decided to erect a five-story warehouse 100 by 125 feet.—The estimated cost of adding Komoka springs to the water supply for the city is $372,500.—A new brick personage for the First Methodist Church is to be erected on Dufferin avenue, opposite the Collegiate Institute

HAMILTON, ONT.— S. H. Kent, city clerk, has taken tenders for construction of sewers in Arthur street, Poplar and Fairleigh avenues.—Tenders will be received by James Dickson, care of Nesbitt, Gauld & Dickson, for purchase and removal of buildings on site of new Central Presbyterian church, corner Hannah and Caroline streets,

QUEBEC, QUE.—The Dominion Government have decided to subsidize extensive docks and railway terminals here in connection with the new bridge and the Grand Trunk Pacific Railway. These new docks will be four miles long. Building permits have been issued as follows: M. Emond, building, Crown street, cost $3,000; E. Nadeau, building St. Genevieve street, cost $3,000.

OTTAWA, ONT.—A petition from the ratepayers has been presented to the Minister of Railways and Canals, requesting a new bridge over the canal at Main street.—The Ladies of Christ Church Cathedral are preparing to raise funds to renew the interior finishings of a cathedral. — The Dominion Government will erect a lighthouse at the entrance to Prince Rupert, B. C., the G. T. P. R. terminal.

SASKATOON, SASK.—By-laws have been carried to spend $30,000 on the establishment of a hospital and $8,000 to secure sites for city hall and fire hall.—Minnesota capitalists have purchased a site, opposite new municipal power house, for a brewery on which work of construction will soon begin. The City Council have granted a 15 year taxation exemption to an American syndicate to establish a flour mill here.

BRANTFORD, ONT.—A separate home for nurses will be erected in connection with the J. H. Stratford hospital, cost $10,000.—The Plymouth Brethren will erect a new church on Darling street, cost $1,400.—Building permits have been issued to the Adams Wagon Works for erection of a brick addition to wheel house, cost $1250, and for brick addition to blacksmith shop, cost $2,500.

VANCOUVER, B.C.—Grant & Henderson, architects, have taken tenders for erection of a stone and brick building on Pender street for W. Walsh.—E. H. Heaps & Co. have decided to rebuild their saw mill on the site of the one recently burned.—It is understood that a local syndicate will establish a system of docks on Burrard Inlet.—Building permits have been issued as follows: A. Berjonst, dwelling, McGill drive, $1000; H. Williamson, dwelling Fifteenth avenue, $1200; J. Wakefield, frame dwelling, Eleventh avenue, $2,000; H. C. and L. Elliott, frame dwelling, Burrard street, $2,500.

TORONTO JUNCTION, ONT.—Dr. Gilmour will build two brick residences, corner Keele and Annette streets.—Prof. Smythe will erect a business block on Dundas street.—Building permits have been issued as follows: W. A. Snider, 2-story frame dwelling Weston Road, $1,000; Jas. Greig, 2-story brick livery, Keele street south, $2,600; G. A. Waddell, 2-story frame dwelling Weston road, $1,000; B. Abbott, 2-story brick cased dwelling, Fisken avenue, $2,000; P. McNulty, 2-story and attic, brick dwelling Annette street west, $2,700; W. J. Jones, 2-story frame dwelling Weston road, $1,800; F. P. and A. G. Laughton, two 2-story brick clad dwellings, Uxbridge avenue, $3,000.

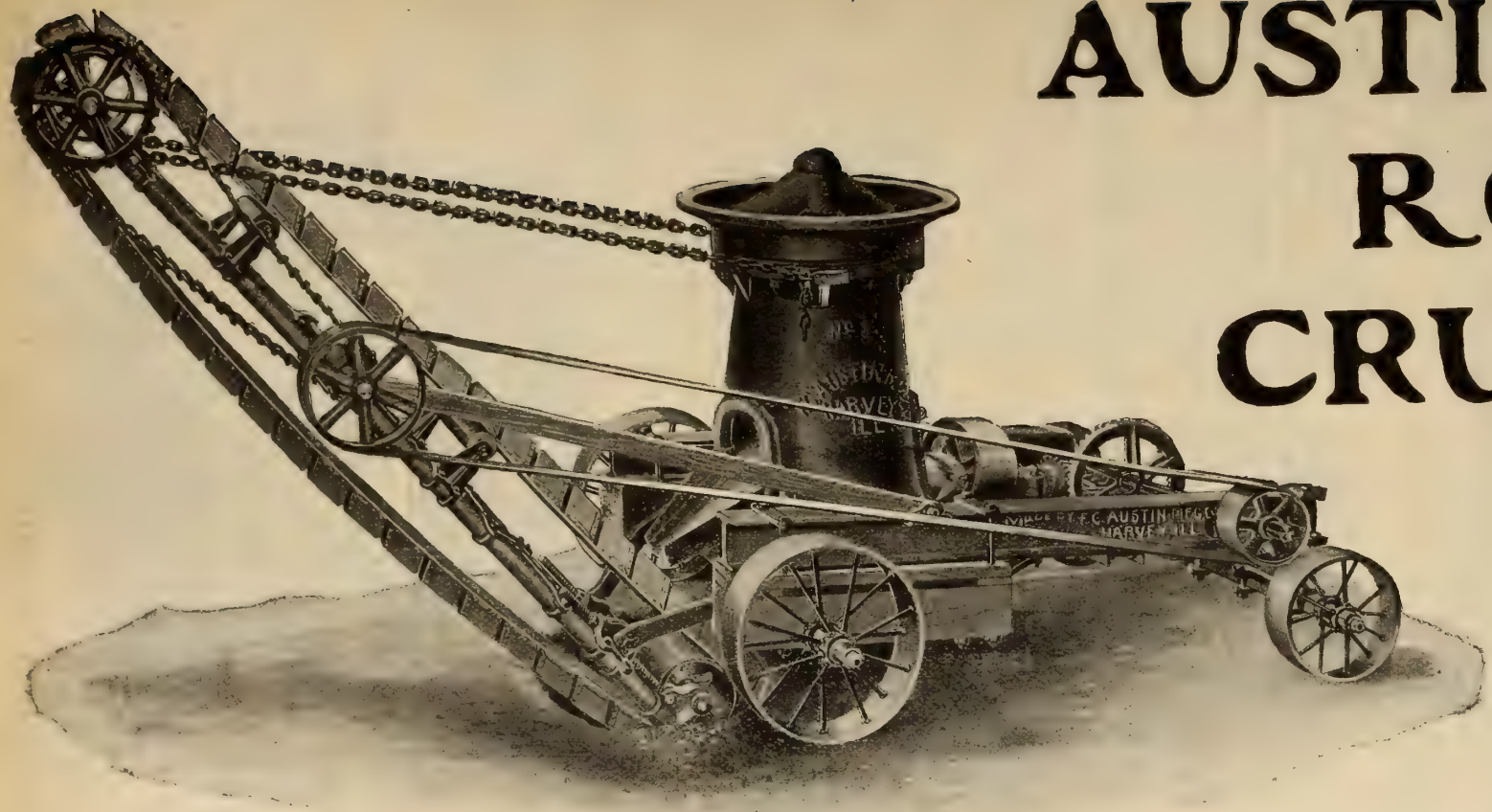
EDMONTON, ALTA.—E. Tessier, box 896, will receive tenders up to November 30th for purchase of $35,000 St. Joachim Roman Catholic Separate school debentures..—The Edmonton Ice Co. will erect a new ice house on block 9 R. L. 20, cost $2,100.—Plans for the new Parliament buildings will soon be prepared.—The Commissioners have reported on the cost of the municipal street railway at $100,790.—Building permits have been issued as follows: Ida Ball, dwelling, Kinistino avenue, $2,000; Queen's Avenue Presbyterian church, manse, McDougall street, $4,000; E. E. Cole, dwelling, Eighth street, $2,000.

MONTREAL, QUE.—L. O. David, City Clerk, will receive tenders up to October 26th for repairs to the Town Halls of Ste. Cunegonde and St. Henri. Plans with L. R. Montbrind, architect.—Building permits have been issued as follows: Ald. James Robinson, six stores corner St. Catherine and McKay streets, cost $16,000; Sir Thomas Shaughnessy, extension to residence, 1149 Dorchester, cost $8,000; Meldrum Bros. stables, Wellington street, cost $6,900; The Canadian Pacific Railway Co., building, Osborne street, cost $38,000; Montreal Rolling Mills, factory, Notre Dame street, cost $25,000; Southam Company, printing office, St. Alexander street, cost $35,000; Ex-Ald. Valliers, sixteen tenement houses, Marquette street, cost $9,000.

WINNIPEG, MAN. — It is understood that the T. Eaton Co., intend building an addition to their store on the site of the Strevel terrace, Donald street.—An agreement has been reached between the City Council and the C. N. R. by which the latter are to build a subway at Pembina street,—The Civic Bridge Committee have passed a resolution recommending the securing of legislation to provide for a bridge at McDermot avenue.— Jewett & Tuthill, architects, have prepared plans for a new church for the Nena street Baptist congregation to be erected, corner Bannantyne avenue and Emily street, cost $30,000.—The Committee on Works have this week taken tenders for construction of asphalt pavement on Notre Dame and Corydon avenues and Preston street, also macadam pavement and a number of granolithic walks, sewer in Dominion street from Portage avenue to Assiniboine.—The City Council gives notice of its intention to construct sewers on Vincent, Quelsh and Newman streets and Alfred, Catherine and Stewart avenues.

TORONTO, ONT.—The Metropolitan Bank have purchased a site on East Queen street on which to erect a building.—A new building for the Department of Domestic Science in connection with the University is to be erected, corner avenue Road and Bloor street by Mrs. Massey-Treble, cost $100,000.—It has been decided to have plans prepared for a new Horticultural building to be erected on the site of the Transportation building

AUSTIN ROCK CRUSHERS



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recently burned. G. W. Gouinlock, architect.—The tenders for the new Normal School buildings at Stratford, Peterboro and North Bay have been opened by Hon. Dr. Reaume, but as the figures were considered too high new tenders will be called for.—Caer Howell hotel on University avenue is to be replaced by a new four or five story apartment house hotel. Plans are being prepared by H. Simpson, architect.—The United Zinc Co., of Boston, will establish a branch of their factory on Adelaide street, west of York.—The Minerva Mfg. Co. desire to purchase the old site of the Bathurst street school on which they propose to erect a factory building to cost $40,000, and a block of stores on College street, cost $60,000.—The Chief of Police has made application to the Management of the Exhibition for a new Police building on the grounds.—The Board of Control will receive tenders up to November 6th for purchase and removal of the buildings from Nos. 142 to 156 Adelaide street west.—Plans for the new fire hall building on Adelalde street west have been prepared and are awaiting the approval of the Board of Control. —Tenders are invited for roofing, galvanized iron work, plastering and plumbing for a dwelling. Plans at 443 Brock ave. —Building permits have been issued as follows: C. A. Scott, pair 2 story brick dwellings, Simpson avenue, cost $4,500; Dr. S. and M. D. Lavine, four 2 story and attic brick dwellings, William street, cost $10,000; St. Cyprians church, 1 story brick church, corner Manning and Follis avenues, cost $15,000; Thos. J. Burns, 2 story brick dwelling, Beach avenue, near Lindsay, cost $2,500; Dr. Addison, 2½ story brick dwelling, Broadview avenue, near Victor, cost $4,000; Merchant's Bank, 2 story brick bank, corner Queen street and O'Hara avenue, cost $6,000; M. Becker, four two story brick dwellings, corner Berkeley and Front streets, cost $4,500; Chas. Watson, brick additions to dwelling, 134-136 Augusta avenue, cost $4,000; Toronto Railway Co., 1 story brick and steel substation and storage shed, corner Dovercourt road and Harrison street, cost $10,000; St. Mark's Church, 1 story brick Sunday school, 197-205 Cowan avenue, cost $4,000; Toronto Plate Glass Co., 1 story brick factory, Don river, near Elliott street, cost $16,000; P. Moylett, 2½ story brick dwelling, Springhurst avenue, cost $5,500; Thos. Trelevan, pair 2 story and attic brick dwellings, Vermont avenue, cost $5,000; Wm. E. Weale, pair 2½ story brick dwellings, 380-382 St. Clarens avenue, cost $6,000; S. C. Howey, 2 story and attic brick dwelling, 84 Denison avenue, cost $3,000; Agnew Bros., 2 story rough cast dwelling, Clinton street, near Bloor, cost $3,000; R. B. Burkell, 2 pair 2½ story brick dwellings, 213-219 Shaw street, cost $10,000; E. P. Atkinson, 2 pair 2 story brick dwellings, 82-86 Crawford street, cost $8,000; E. E. Rutherford, 2 pair 2½ story brick dwellings, Grace street, cost $8,800; Fred Fisher, 2 story roughcast dwelling, West avenue, cost $2,000; W. E. Mitchell, 2 story and attic brick dwelling, Wolfrey avenue, near Broadview, cost $4,500; Thos. Whaley, 2 story and attic brick dwelling, Beatty avenue, cost $2,400; E. Smith, 2 story brick dwelling, Lynd avenue, cost $2,000; J. Lancaster, 2 story roughcast dwelling, brick front, Millicent street, cost $4,500; George Younge, 2 story brick dwelling, Pearson avenue, cost $2,600; J. E. McLury, 2½ story brick dwelling, Poplar Plains road, cost $6,000; C. W. Chadwick, three 2 story brick dwellings, 80 Dunn avenue, cost $7,500; Brayton & Delworth, pair 2½ story brick dwellings, 33 and 35 Howland avenue, cost $9,000; A. George, 2 story and attic brick dwelling, Crawford street, near Arthur, cost $3,500; Bank of Toronto, 2 story brick bank, corner Elm and Elizabeth streets, cost $20,000; F. K. Thompson, 4 story brick dwelling, Jarvis street, near Gerrard, cost $3,500; R. McCauley, 2 pair 2 story and attic brick dwellings, Macpherson avenue, near Molson street, cost $10,000; John Ewing, pair 2 story brick dwellings, Moutray street, cost $4,600; Mrs. E. Tilley, 2½ story brick stores and dwellings, corner Augusta and Oxford streets, cost $9,000; N.H. Brady, 2 story brick dwelling, Galley avenue, cost $6,400; Kidney & McKelvie pair 2½ story brick dwellings, Walmer road, near Castle avenue, cost $6,000; A. Reeves, 2 story and attic brick dwelling, Rusholme road, cost $3,000; Walter Marks, 4 pair 2½ story brick and stone dwellings, Concord avenue, near Hepbourne street, cost $20,000; Mrs. E. Tolhurst, 2 story brick dwelling, Fern avenue, cost $3,000; Macpherson Trustees, 2 story and attic brick dwelling, 45 Chestnut Park road, cost $5,500; Wm. Radcliffe, 2 story and attic brick and stone dwelling, Farnham avenue, cost $4,500.—The Board of Control will receive tenders up to October 30th for galvanized iron work, etc., in recovering rhe roof of south building, St. Lawrence market. Specifications with City Architect.

FIRES.

Plant of the Edmonton Brick Co., Edmonton, Alta., badly damaged.—Premises of the Gallock Packing Co., and Empire Soap Co,, Hamilton, Ont., loss $2,000.—Twenty dwellings at St. Charles, Que., loss $25,000.—Buildings of A. Budaoin, A. Lessard and Dugal's lumber yard, Quebec, damage $10,000. —Edward Couture's store, corner St. George and Cote du Passage, Levis, Que., totally destroyed.—Electric light station, jail, court house, Episcopal and Baptist churches and 50 residences, Summerside, P. E. I., loss $200,000.—Barns of John Newcomb, Goderich, loss $3,000.—Plant of the Brantford Starch Works, damage $30,000.—Moulding shop of I. E. Shantz & Co, Berlin, Ont., loss $2,000.—Transportation building, grand stand etc., on the Exhibition grounds, Toronto, loss $100,000.—Buildings of Clark Bros. & Hughes, undertakers, Winnipeg, loss $10,000.—Stores of O. Carignan & Fils, 26 Des Forges street, Three Rivers, Que., loss $6,000.—Evaporator of Collier Bros., Napanee, Ont., loss $4,000.—Store, postoffice and several dwellings at Aldrich, Ont., loss $50,000.

CONTRACTS AWARDED.

CARNDUFF, MAN.—Erection of Anglican church and rectory: J. H. Timms, contractor, Melita.

MELFORT, SASK.—Erection of new hospital building: Sidney Smart, contractor, cost about $4,000.

SASKATOON, SASK.—Erection of main building for brewery: Willoughby & Covert, Contractors, cost $50,000.

WELLAND, ONT.—Erection of new buildings for the Canada Forge Co.: Welland Construction Co., contractors.

NEPIGON, ONT.—Construction of C. N. R. branch from this place to the G. T. P. R.: James Conmee, M. P., contractor.

VANCOUVER, B. C.—Erection of new building for Canadian Bank of Commerce: Kelly Bros. and Mitchell, Winnipeg, contractors.

PORT ARTHUR, ONT.—The Vigars, Shear Lumber Co. have secured the contract for supplying nearly half a million ties for the Canadian Pacific Railway.

BRANTFORD, ONT.—Grading of Hamilton road from this city to Cainsville: Geo. Take, contractor, at 70 cents per yard including gravel and spreading.

NEW WESTMINSTER, B. C.—Construction of G. N. R. line from this city to Blaine, about 50 miles: Ironsides, Rannie & Campbell and the B. C. General Contract Co., Vancouver.

DRYDEN, ONT.—A. Phillips & Co., have secured a sub-contract for the construction of fifteen miles of the transcontinental railroad in J. D. McArthur's contract, about 18 miles north of this place.

WINNIPEG, MAN.—The Fire, Water & Light Committee have recommended the acceptance of the following tenders: Allis-Chalmers-Bullock, for supply of two air compressors and motors for wells Nos. 5 and 6, and $3,800; Canada Rubber Co., for supply of 5,000 feet of 3½ inch fire hose, Unique brand, for high pressure fire service system, at $1.30 per foot; Winnipeg Rubber Co., for supply of 500 feet of 3½ inch fire hose, Eureka brand, for high pressure fire service system, at $1,65 per foot.

MOOSOMIN, SASK.—Contracts for the water works system have been awarded as follows: Construction and laying of the storm sewer and water mains, T. H. Masterman, Indian Head, $8,085; gasoline engines and installing, Burrige & Cooper, Winnipeg, $4,515; stand pipe and installation, Jenckes Machine Co., Sherbrooke, Que., $5,550; water main pipes and specials, Montreal Pipe Foundry Co., Montreal, Que., $4,645.75; hydrants and valves, R. D. Wood Co., 400 Chesnut street, Philadelphia, Pa., $972; sewer pipe, Macomb Sewer Pipe Co., Macomb, Illinois, $3,554.25; consulting and engineer in charge Willis Chipman, C. & S. E., Toronto.

TORONTO, ONT.—Construction of new reference library building, corner St. George and College streets: Excavating, Page & Co, $3,500; masonry and brickwork, Brown & Love, $68,720; concrete and paving, Gardner & Co., $24,820; terra cotta, Excelsior Terra Cotta Co., New York, $12,540; carpentry and joining, Chas. Rodgers & Co., $12,350; painting and glazing, Joseph McCausland, $5,990; plastering, Hoidge & Co., $32,958; roofing and sheet metal, Ormsby & Co., $3,240; steel work, McGregor & McIntyre, $8,884; stackwork, Snead & Co., Jersey City, $31,400; plumbing, J. E. Gray, $2,464; steam heating, McGuire & Co., $15,600; elevators, Turnbul & Co., $14,750.

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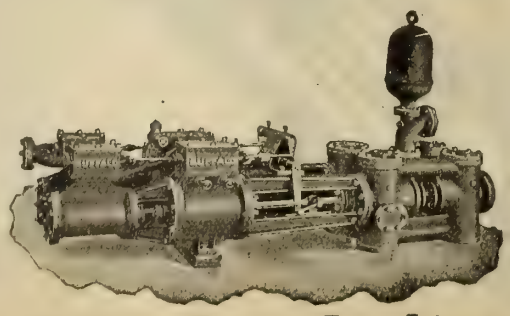

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BIDS.

The following two tenders were received by the Board of Control for the laying of the mains for the high pressure fire system : 20 inch flange pipe, 4,340 ft., No. 1, $4.13; No. 2, $3.21; 20 inch spigot pipe, 2,220 ft., No. 1, $3.11; No. 2, $1.85; 12 inch spigot pipe, 23,856 ft., No. 1, $1.49; No. 2, $1.65; 8 inch spigot pipe, 14,964 ft., No. 1, $1.15; No. 2, $1.30; 8 inch flange pipe, 100 ft., No. 1, $2 58; No. 2, $2.44; 8 inch hydrant connection, 2,840 ft., No. 1, $1.55; No. 2, $1.15; placing hydrants, 1,000 yards, No. 1, $6; No. 2, $1; brick masonry, 220 yards, No. 1, $12.50; No. 2, $1; extra excavation, 3,700 yards, No. 1, $1.20; No. 2. 50 cents; iron for hands, No. 1, 7 cents; No. 2, 6 cents; cutting 12 inch, 1,000 ft., No. 1, $2; No. 2, 1 cent; cutting 6 inch, 500 ft., No. 1, $1; No. 2, 1 cent; cutting 4 inch, 100 ft., No. 1, 90 cents; No. 2, 1 cent. The total amount of tender number two is $85,000, and the other in the neighborhood of $100,000.

Mr. W. M. Macphail has resigned his position as roadway engineer to become president and manager of the Western Bitulithic and Contracting Company, with headquarters in Winnipeg.

Mr. H. J. Purcer, of Ottawa, died at his home in that city on October 15th. He was a resident of Winnipeg in its early days, when he engaged in the contracting business as a member of the firm of Garson & Purcer. Of late years he has carried on the business in Ottawa under the firm name of H. J. Purcer & Sons.

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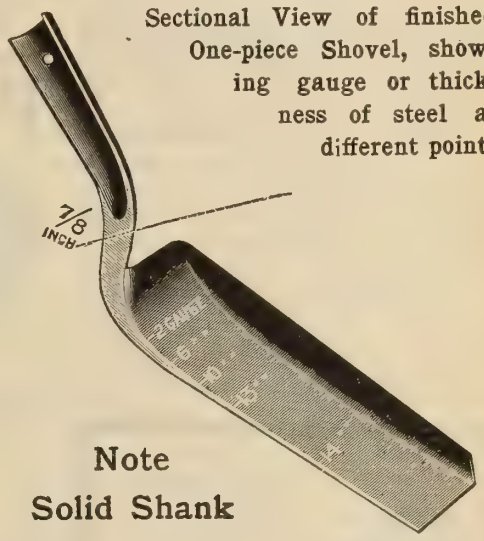

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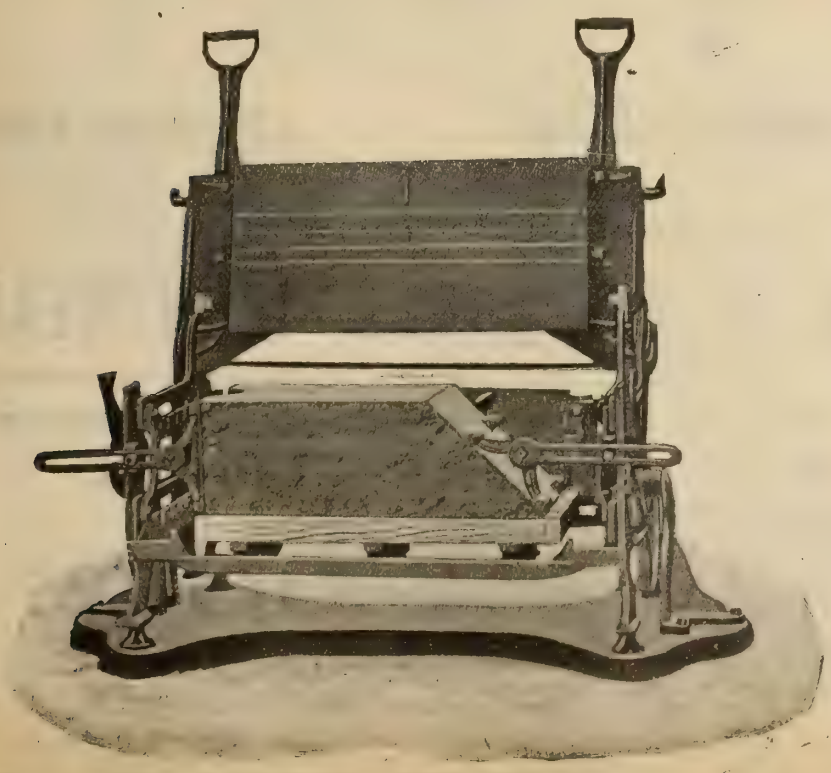

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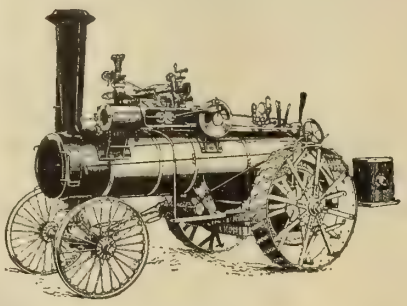
NOTES.

The partnership of Miller & Finch, painters, Vernon, B. C., has been dissolved.

The business of Alexandre S. Ross, builder, etc., Montreal, has been registered under the name of A. Sinclair Ross & Co.

If the pervasive English sparrow has reached Michigan a new indictment can properly be laid against the little pest, while another is brought against the contractor who erected the waterworks stand-pipe at Three Oaks, in that State, for not having closed the top of the pipe with the cover, or netting, called for by the specification. Alarmed by an outbreak of typhoid-fever in the town, the authorities naturally investigated the water-supply, and when they reached the top of the stand-pipe discovered, as the report reads, "the dead bodies of several thousand young sparrows in various stages of decomposition covering the surface of the water." Large numbers of parent birds had nested on a ledge surrounding the inside of the pipe, and then, as the young ones chanced to die in the nest, simply scratched the bodies overboard into the town's drinking-water; and the supply of avian cadavers was kept up by the fall of fledglings, whose pinions were too weak to carry them across the gulf, and the victims of the perpetual domestic and tribal feuds. The twenty-one persons now struggling with typhoid-fever in this little town, that numbers only a thousand inhabitants, have very good ground for suing the forgetful contractor for damages.



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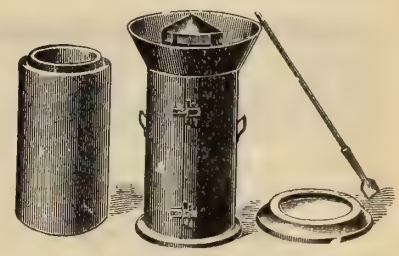

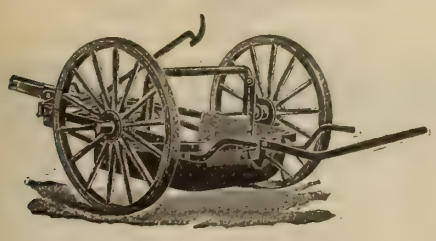

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CLASSIFIED INDEX OF ADVERTISERS

ACCIDENT INSURANCE Page
Ontario Accident Insurance Co. 19

BLUE PRINTS
Electric Blue Print Co. 7

BLOWERS
Buffalo Forge Co. 4

BRIDGES (CONCRETE)
Steel Concrete Co. 15

BRIDGES (STEEL)
Canadian Bridge Co. 19
Canada Foundry Co. 23
Dominion Bridge Co. 15
Jenks & Dresser 16
Phoenix Bridge and Iron Works 15

CEMENT
Alsen Portland Cement Co. 9
Bremner, Alex 6
Currie & Co., W. & F. P. 13
DeSola, C. I 7
Gray & Bruce Portland Cement Co. 21
Hyde & Co., F 22
Hanover Portland Cement Co 19
Lakefield Portland Cement Co. 14
McNally & Co., W. 7
Morrison & Co., T. A. 13
Morgan, T. M. 15
National Portland Cement Co. 18
Owen Sound Portland Cement Co. 7
Ontario Portland Cement Co. 16
Raven Lake Portland Cement Co. 13
Stinson-Reeb Builders' Supply Co. 17
Toronto Pottery Co. 22
Thorn Cement Co. 14

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Hopkins & Co., F. H. 24
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Loignon, A. & E. 7
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Bryans & Co., E. E. 7
Zarossi, Banco 15

CORRUGATED IRON
Metallic Roofing Co. 5
Pedlar People 22

CRUSHERS (STONE AND ROCK)
Allis-Chalmers-Bullock 11
Beatty & Sons, M. 22
Dartnell, E. F. 6
Hopkins & Co., F. H. 24
Mussen & Co., W. H. C. 3
Morrison & Co., T. A. 13

DEBENTURES
Nay, Anderson & Co. 22
Stimson & Co., G. A. 21

DRILLING CONTRACTORS Page
Harvey, J. 13
Peat & Sons, James 14

ENGINEERS AND CONTRACTORS
British Columbia General Contract Co. 23
Canadian White Co. 6

ENGINEERS (CIVIL)
Archibald, George H. 15
Chipman, Willis 17
Connor, Clarke & Monds 17
Davidson, Shirley 21
Davis, Johnston 15
Fielding, John S. 7, 8, 17
Galt, John 7
Jackson, John H. 17
Lea & Coffin 17
Leofred, A. 21
McConnell, Brian D 13
McDougall & McRae 7
Parke, Roderick J. 17
Scott, Wm. Fry 21
Simpson, T. T. 21

ENGINEERS (MECHANICAL)
Farmer, John T 21
Galt, John 7

ENGINES
Cameron & Co, Hugh 16
Sawyer & Massey Co 6

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Hopkins & Co., F. H. 24
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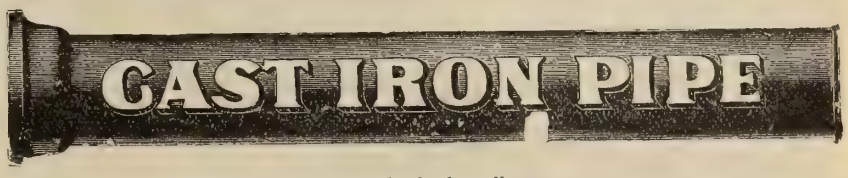

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SEWER CONSTRUCTION IN TORONTO.

The following table from the annual report of the City Engineer, shows the length in feet of sewers constructed duriug the year 1905 :

9-inch tile pipe	1,364	lin. ft.
12-inch tile pipe	13,288	"
15-inch tile pipe in concrete	7,852	"
18-inch tile pipe in concrete	500	"
2 ft. x 3 ft. brick	2,018	"
4-ft. steel pipe	298	"
Total	25,320	"

There are in the city 245.11 miles of sewers and 71 automatic flush tanks.

During the year there were ; 121 new manholes built ; 106 manholes repaired ; 641 new gullies built ; 90 gullies repaired ; 63 miles of sewers flushed and cleaned.

Break in Sewer, Robert Street, Toronto.

AN EIGHT-TRACK REINFORCED-CONCRETE VIADUCT.

Eight tracts of the Canadian Pacific Railroad cross Main St., Winnipeg, Manitoba, overhead at an angle of 86 deg. 4 min. on a reinforced-concrete structure, which is of interest both on account of the special design of the concrete groined arches in it and from the character of the reinforcement, which consisted of scrap rails bolted and trussed together to resist stress in flexure, tension and shear. The small depths of the arch crowns is noteworthy, especially in consideration of the fact that the tracks are carried over them in ballasted troughs.

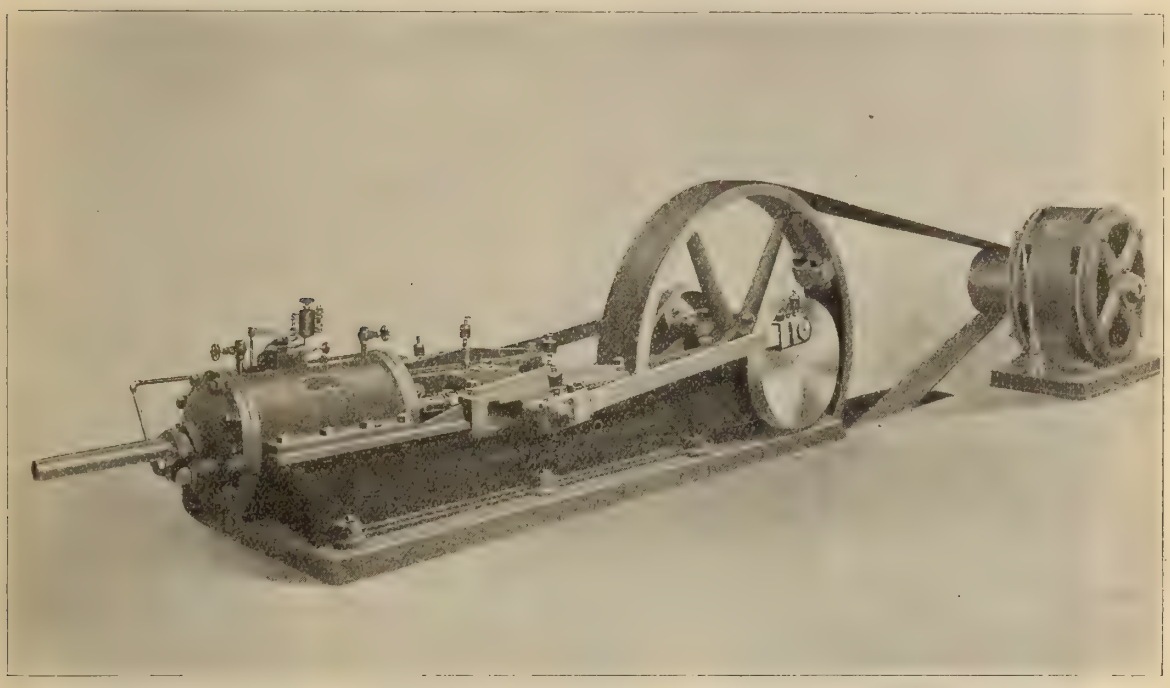
The railroad tracks occupy the full width of Point Douglass Ave. and were raised 5ft. above their former grade in order to secure a maximum clearance of 14 ft. over the two electric car tracks on Main St., and to allow the latter to remain above water level when they were depressed 11 ft. 11 in., thus permitting the subway to be built with a total length of 646 ft. 8 in. with approach grades of 1 :20. The width of the structure is 100 ft. over all, exclusive of the stairways, and it only receives about ¾ of the original street, a strip 32 ft wide being maintained at the original grade east of the subway on both sides of the railroad tracks, but not being carried across them. The structure consists of an east and west approach, with concrete retaining walls paralled to Main St. and an arched centre portion, 140 ft. long, which forms a continuous bridge floor, supported by four rows of 11 columns and abutments each.

The principal arches have their axes parallel with Main St. and are arranged in 5 spans. A 23-ft. 3-in. centre span over the double-track electric street railway is flanked by two 23-ft. 3-in. similar spans over the driveways and two 11-ft 10½in. full-centred spans over the sidewalks. The large spans are false ellipses made with seven centres each, and are relieved in elevation by triangular panels 1½ in. deep over spandrels which serve also to define the extrados.

The curves of the intrados are described with radii of 2 ft. 2 in., 3 ft. 11 in., 10 ft. 10 in. and 27 ft., the rise being 5 ft.

The tops of the columns or piers are integral with transverse beams 34 in. deep parallel to the railroad tracks and reinforced by trusses made with rails embedded in the concrete near the upper and lower surfaces of the arches and latticed together. The beams are connected and the ballast is carried by concrete slabs 18 in. thick at the centre whence they are pitched both ways for drainage, and are reinforced by rails projecting at both ends into the beams and by longitudinal transverse round rods, the latter bent upwards at the ends and continuous across the main beams on the centre lines of each to intersect the corresponding rods from adjacent panels. The under sides of the slabs and beams have concave surfaces forming the soffits of the groined arches.

"INGERSOLL" COMPRESSORS



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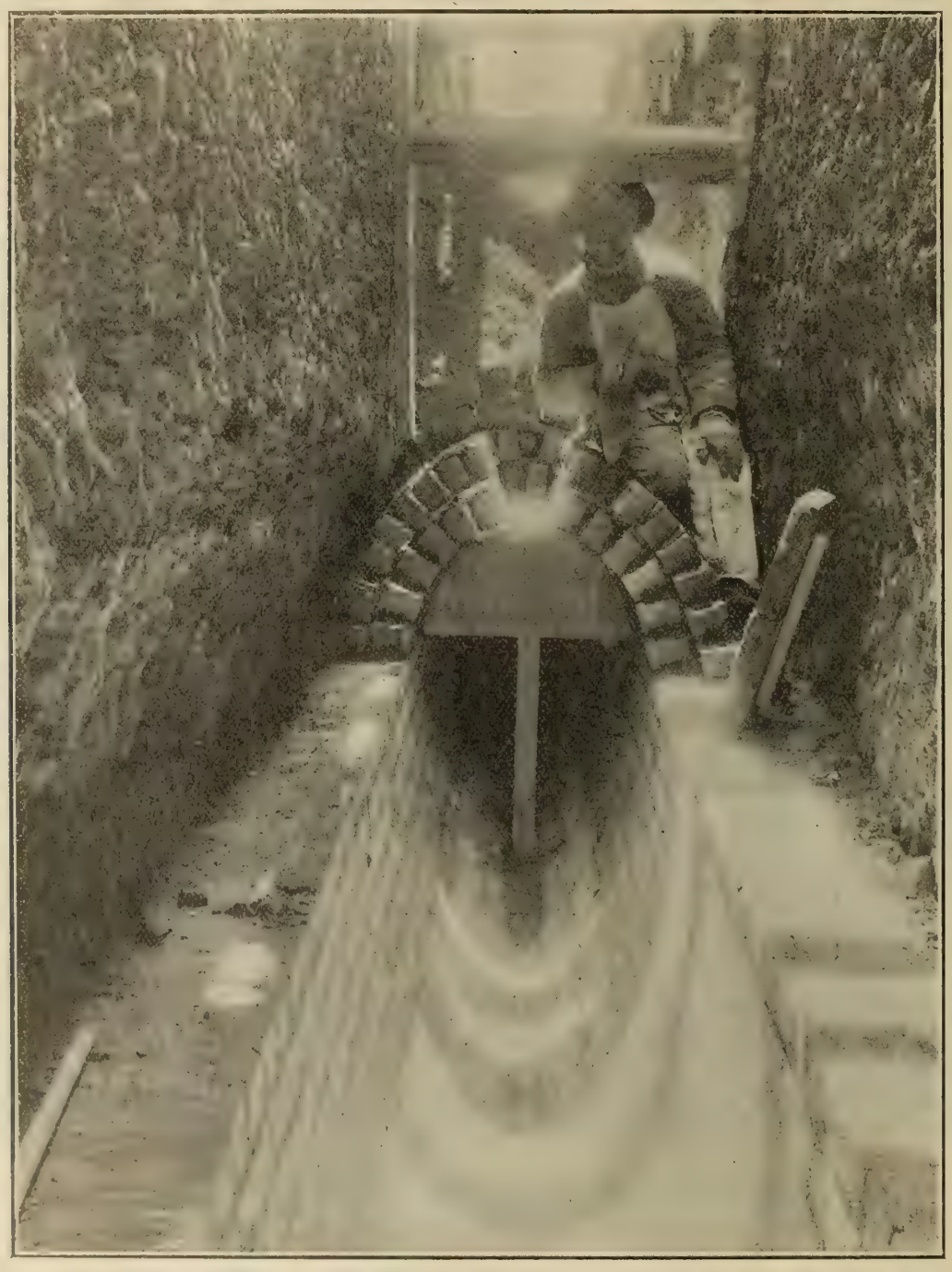
Between the tracks are two 15 ft. platforms and one 9 ft. platform, each built with top and bottom slabs with an air space between, and pierced with skylights made removable so as to provide for the distribution of snow on the roadway below if necessary. The upper platform slabs are reinforced with expanded metal and are 6 in. thick for a 15 ft. platform and 4 in. thick for a 9 ft. platform. The lower slabs are 3 in. thick at the arch soffit, and are not reinforced. The piers or columns are vertical on the transverse faces and battered on the longitudinal faces, forming solid rectangular cross-sections from 18 by 36 in. to 21 by 36 in. at the springing line, except four piers 8 ft. wide with chambers 3 ft. wide filled with 1:4:7 concrete and four other special piers 5 ft. wide without chambers.

The column shafts are made integral with expanded bases battered about 1:1 on both sides to widths of from 6 to 10 ft. at the bases where they unite with the continuous concrete longitudinal footings 7½ and 8½ ft. wide and 2 ft. deep. The footings are carried to a total depth of 5 ft. below the roadway and extend 12 in. below the top on their triple rows of piles. They are reinforced by single longitudinal lines of rails on the centres of the piles and by an upper tier of three or four transverse rails at every pier. Each column is reinforced by two vertical rails extending from above the springing line down nearly to the top of the footing and by six vertical ¾ in. rods, one in each corner and one in the middle of each long face, tied together with horizontal wires about 3 ft. apart. The upper ends of these rods are bent parallel to the intrados of the arch and are continuous from the tops of the footings to the centres of the spans, where they are bent over the bottom chords of the trusses reinforcing the main beams. All of the corners of the columns are rounded to a radius of 2 in., and the angles at their intersection with the bases are covered by fillets joining protective mouldings, resembling the tops of buried wheel guards at pavement level.



Avenue Road Sewer—Invert and Crown.

The reinforcement trusses are made continuous across the full width of the bridge. They are 30 in. deep over all, with top and bottom chords formed with single rails spliced with pairs of ordinary angle bar track splices. The heads of the rails are turned in opposite directions and their flanges in the same vertical plane, are connected by 2 x 5-16 in. lattice basr riveted on. The beams and trusses terminate in counterforts of the retaining walls,

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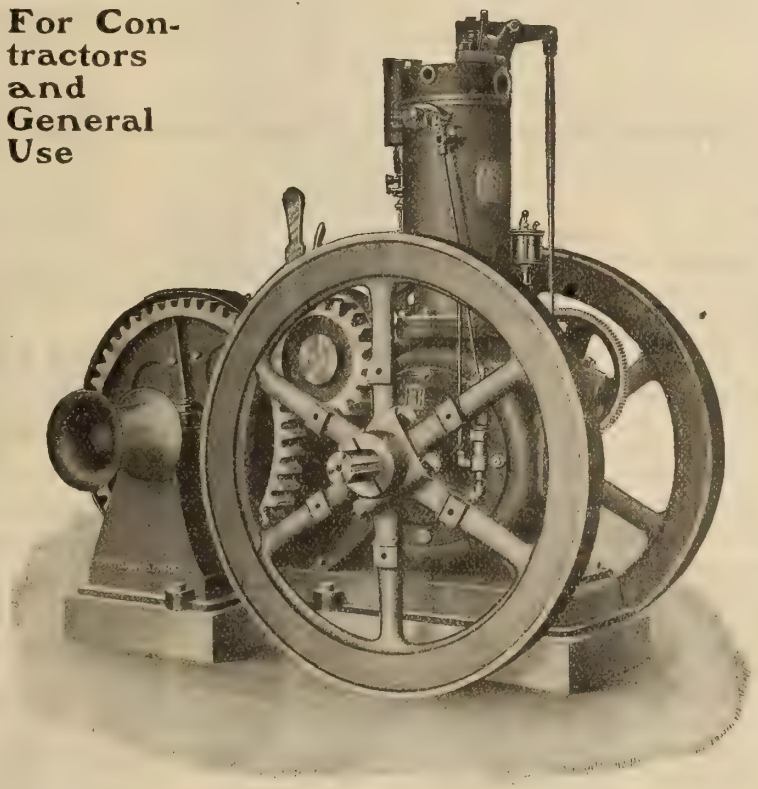

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between which the wall slabs are 12 in. thick at the top and 20 in. thick at the base, and are reinforced by horizontal rails 2 ft. apart and 2 in. clear of the inner face of the wall. The counterforts are each reinforced by two rails 15 ft. long parallel with the bridge and 3 in. clear of the other face.

The beams are reinforced at points of maximum moment by loose rails 15 ft. long near the top and bottom surfaces arranged in 2, 3, 4, 5, or 6 pairs in different beams. The rails of each pair are connected by ¾ in. diagonal shear bars 15 in. apart and 3 ft. long with their ends bent to fit into holes 5 in. apart in the rail web.

The rectangular skylights are 4 x 6 ft. and 4 x 3 ft. and are made with cast-iron frames set on rails bedded in concrete to form curbs around the skylight wells, the walls of which are bevelled 7 :12 so as to diffuse light in the subway.

All footings and the retaining walls in the approaches were made with 1 :4 :7 gravel concrete. The arches about the springing line were made of 1 :2 :4 broken-stone concrete and the remainder of the structure was made with 1 :3 :5 gravel concrete. Imperial, Iron Clad, and Atlas brands of Portland cement in equal quantities constitute the 7,479 barrels used in the work. All concrete above the springing lines of the groined arches was built in sections parallel with the railway tracts on each of which the work was carried on without intermission until it was completed.

The structure was designed under the direction of Mr. E. H. McHenry, then chief engineer of the Canadian Pacific Railway Co. The preparation of the plans was supervised by Mr. C. N. Monsarrat, engineer of bridges, and Mr. J. E. Schwitzer, division engineer at Winnipeg, was in direct charge of the construction. The contract was awarded to Deeks & Deeks, Winnipeg.

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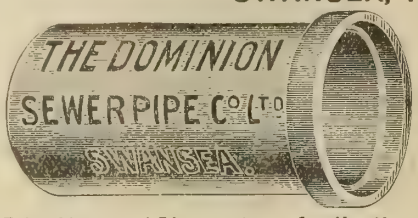

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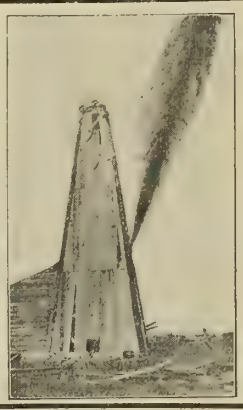

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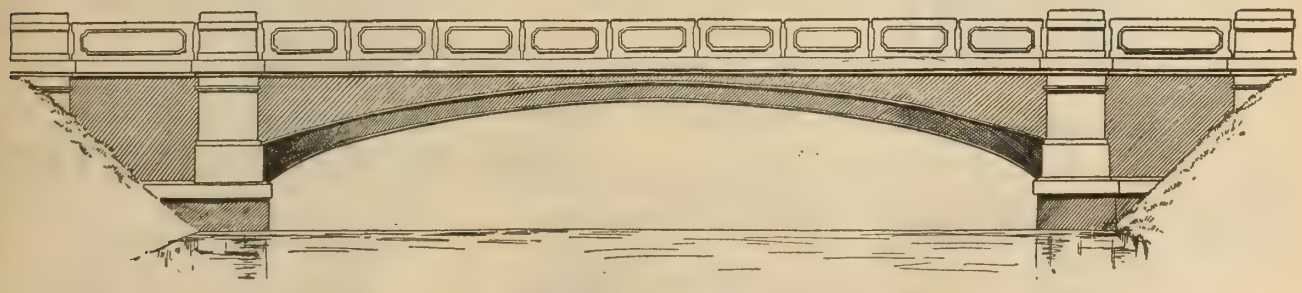

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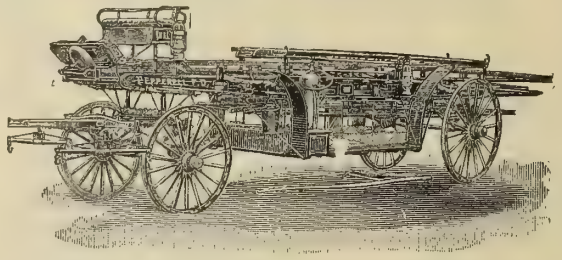
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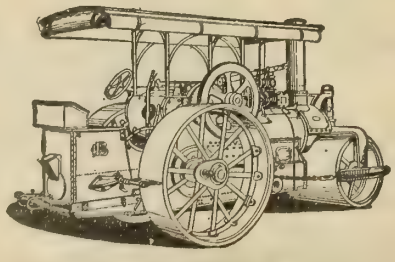
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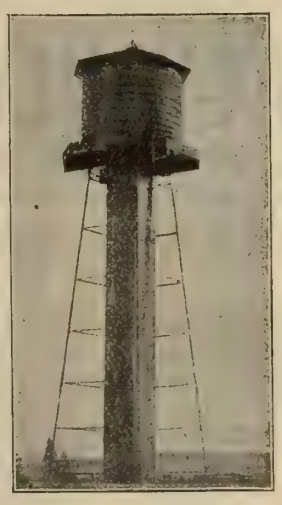

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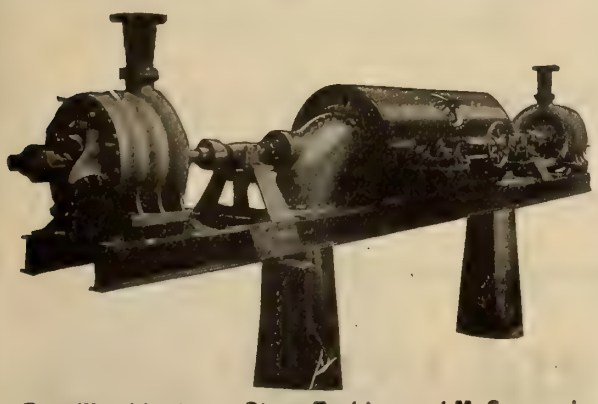

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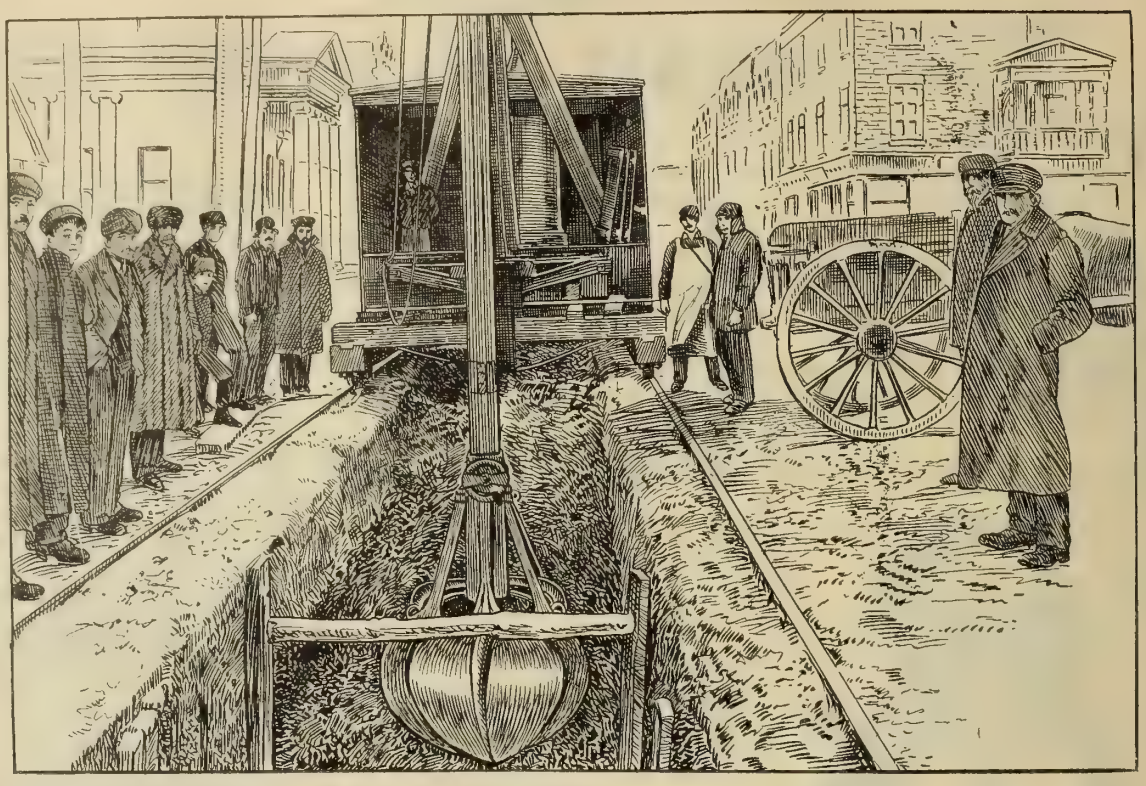

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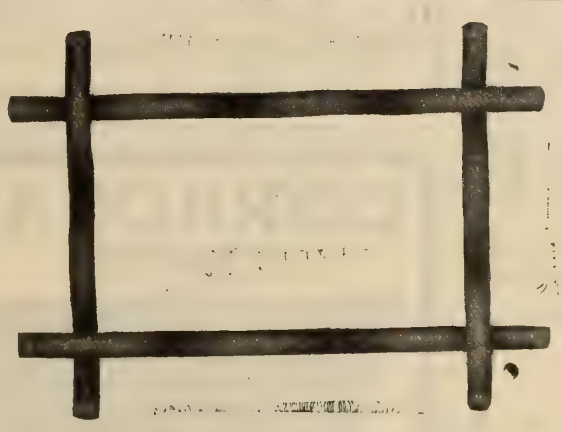

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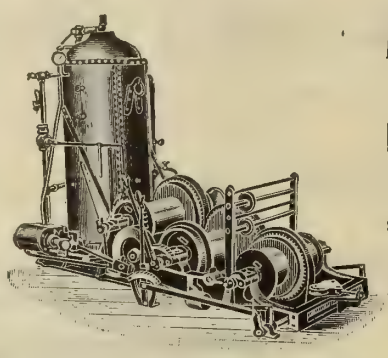

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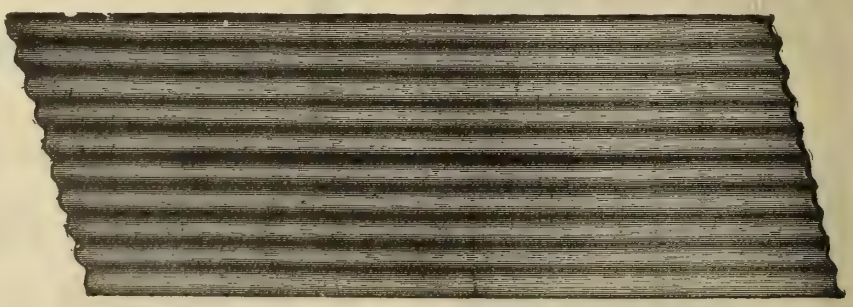

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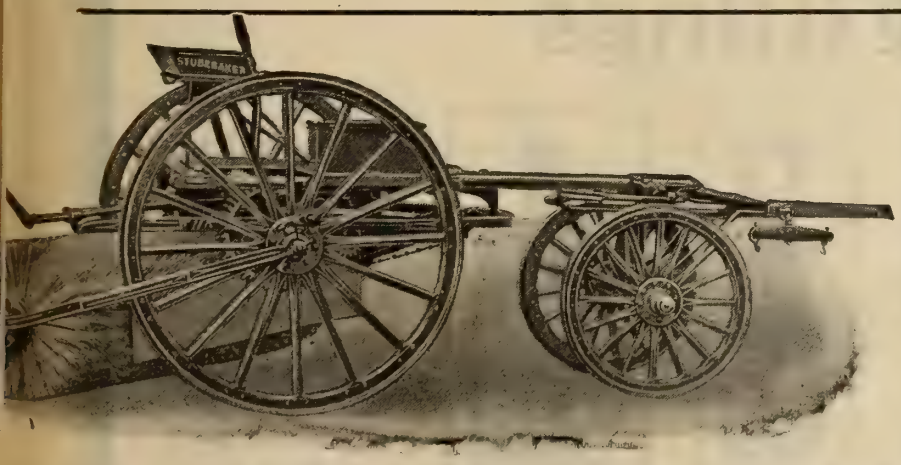

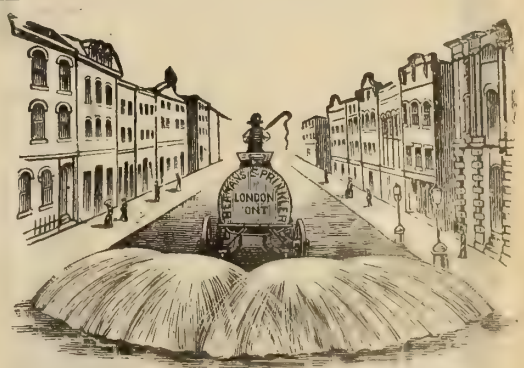

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TO CONTRACTORS

Separate or bulk tenders addressed to the undersigned (and marked "Tenders") will be received up to 12 o'clock noon 12TH NOVEMBER, 1906, for the several trades work required in the erection and completion of a Collegiate Institute Building in the town of Picton, Ontario. Plans and specifications may be seen at the office of William Newlands, Esq., architect, Kingston, and at the office of the Secretary of High School Board, Picton. Lowest or any tender not necessarily accepted.

T. BOG,
Picton, October 17, 1906. Secretary.

Town of Selkirk

MANITOBA

Separate or bulk tenders will be received by the undersigned up till noon of the 12TH OF NOVEMBER NEXT, for the following works:

1. The supply of Vitrified Sewer Pipe f.o.b Selkirk in carload lots, of sizes running from 9 inches to 14 inches in diameter. Tenders to state prices of Y junctions for various sized pipes and slants for connections to concrete sewers.

2. The excavation and refilling of sewer trenches, providing material, constructing concrete sewers, manholes and catch basins, the town supplying the ironwork and tile slants, the delivery and laying of vitrified sewer pipe.

Plans, profiles and specifications can be seen at the office C. A. Millican, C. E, 433 Main Street, Winnipeg, and at this office on and after 1st N vember.

A marked cheque for 5 per cent. of the amount to accompany each tender. The lowest or any tender not necessarily accepted.

By order,
(Signed) THOS PARTINGTON,
Secretary-Treasurer.

Town Hall, Selkirk, October, 1906.

George McFadden, painter, Lindsay, Ont., has assigned to J. H. Sootheram.

The new premises of M. Beatty & Son, Welland, Ont., are well under way, most of the structural work on the building being completed. When finished this plant will be one of the most up-to-date in Canada.

CONTRACTS OPEN.

WINDSOR, ONT.—A large addition to Hotel Dieu is being considered.

HUMBOLT, SASK.—The Massey-Harris Co., will erect a large track warehouse here.

SYDNEY MINES, N. S.—Local capitalists are considering the erection of a skating rink here.

PORTSMOUTH, ONT.—It is understood that the Lakeview Hotel recently burned will be rebuilt.

ST. PAULIN, QUE.—The St. Leon Waters Limited Co., purpose erecting a large hotel at the springs.

BELLEVILLE, ONT.—The Lehigh Portland Cement Co., will erect a large cement plant at Point Ann.

MOOSE JAW, SASK. — Elsom & Wheelock have decided to erect a large distributing warehouse here.

SASKATOON, SASK,— John Haeschen, of the brewery company will erect a residence near the new brewery.

PORT ARTHUR, ONT.—The steel company of Sydney, N.S., are considering the establishment of a plant here.

HESPELER, ONT.—A by-law was carried last week, to loan $15,000 to the Hespeler Machine & Tool Co., to locate here.

ST. MARY'S, ONT.—It is stated that the G. T. R. have purchased a site, corner Queen and James streets, for a new station.

QUEBEC, QUE.—It is reported that plans have been prepared for three story depot for the Quebec Railway, Light & Power Co.

NORTH BATTLEFORD, SASK.—The town has engaged Willis Chipman, C. E., Toronto, to report on a scheme of waterworks.

ROSTHERN, SASK.—Geo. Braden will receive tenders up to November 15th for purchase of $3,000 five per cent. debentures.

HIGH VIEW, SASK.—J. A. Dorrance is calling for tenders for erection of a school house in section 23-11-3, High View, S. D.

SOUTH END, ONT.—C. F. Munro, reeve, will receive tenders up to November 3rd for purchase of $3,000 4½ per cent debentures.

PRINCE ALBERT, SASK.—A foundry company are negotiating with the City Council regarding the establishment of a foundry here.

NELSON, B. C. — Tenders will be received by the manager of the Canadian Bank of Commerce for erection of a bank building here.

KENTVILLE, N. S.— J. Carroll, town clerk, will receive tenders up to October 31st for purchase of $9,000 sewerage debentures.

OSHAWA, ONT.—T. Morris, town clerk, will receive tenders up to November 7th for purchase of $7,000 4½ per cent town debentures.

WATERLOO, ONT. — The Town Council have resolved that a by-law be voted on to raise $23,000 to extend and improve the sewer farm.

GRAND FORKS, B. C.—J. A. McCallum, city clerk, will receive tenders up to November 30th for purchase of $4,000 city debentures.

ST. THOMAS, ONT.—Jas. A. Bell, city engineer, will receive tenders up to October 31st for kalsomining and painting interior of city hall.

GODERICH, ONT.—Warrener Bros. have purchased the site of the old marble works, on Hamilton street, on which they will erect a modern bakery.

DIGBY, N.S.—A New York company have purchased the lands of the Gaspereaux Lumber Co., and intend erecting a pulp mill on the Gaspereaux river.

CHILLIWACK, B. C.— The by-law has been carried to give the B. C. Electric Railway Co. the franchise to operate a New Westminster-Chilliwack line.

BIRD'S HILL, MAN.—H. I. Thompson will receive tenders up to November 1st for construction of a concrete culvert at Chandler's Creek, St. Paul municipality.

CHARLOTTETOWN, P. E. I.—L. B. McMillan, Secretary of Public Works, has taken tenders for repairing Scott's bridge, Bannockburn road, Queen's county.

STE. SCHOLASTIQUE, QUE. — Hon. W. A. Weir, Minister of Public Works, visited the town in connection with the request for a new court house for Terrebonne district.

STELLARTON, N.S.—Hattie Brothers have purchased a site for their new carriage factory.—Thompson & Sutherland, New Glasgow, have purchased a site for a large building.

GALT, ONT. — The Town Council have approved of granting a franchise to the Dominion District Steam Heating Co., to construct and operate works here for supply of light, heat and power.

LETHBRIDGE, ALTA. — The Medicine Hat Woollen Mills Co., have taken tenders for the erection of a brick mill building for the Lethbridge Woollen Mill Co., J. A. Macdonald, architect.

BRAMPTON, ONT.—Willis Chipman, C. E., Toronto has been appointed chief engineer of the proposed sewerage scheme.—The Town Council intend having plans for the new music hall prepared at once.

FORT WILLIAM, ONT.—The by-law to extend the water system to Loch Lomond, cost $150,000, has been carried. The by-law to build a steel bridge over the Kaministiquia river, cost $141,000 was defeated.

WOODSTOCK. ONT. — Surveys have been made for a proposed C. P. R. line between this town and Brantford. — The Minister of Public Works has this week taken tenders for the erection of barn and stables at the Hospital for Epileptics.

PEMBROKE, ONT. — The Town Council give notice of their intention to construct sewers in Prince, Doran and Herbert streets.—The Royal Bank have purchased a site, corner Pembroke and Prince of Wales streets, for a modern bank building.

WILKESPORT, ONT.—W. H. McGhee will receive tenders up to November 3rd for construction of the new Whitehead tap drain, and for improvement of a portion of the old drain and part of Grape Run, in Sombra and Chatham Townships.

MEDICINE HAT, ALTA.—Tenders will be received by the secretary-treasurer up to November 5th for erection of a water purification building. Plans with City Engineer.—The Calgary Presbytery have decided to establish a new church in the north part of the city.

OWEN SOUND, ONT. —The Adam Beck Co., of London, have been inspecting sites here for a large factory building which they intend erecting on the Georgian Bay.—Knox church congregation have purchased a site on Baker street for a new Sunday school building, for which plans will soon be prepared.

PETERBORO, ONT.— The Young Conservative Club are considering the erection of a three story building, for stores, club rooms, etc. — The Royal Bank have secured premises in the Bank of Commerce block which they will have remodelled for their use.

CALGARY, ALTA.—It is stated that J. D. King & Co., boot and shoe manufacturers, will establish a branch here.—Bow River lodge and Perfection lodge have purchased a site, corner Seventh avenue and First street, for a Masonic lodge building to cost $50,000.—The J. H. Ashdown Co. have decided to erect a large three story warehouse here.

TORONTO JUNCTION, ONT. — Plans have been prepared by Ellis & Connery, architects, Toronto, for a dwelling for T. Tennant.—Building permits have been issued as follows: William Gourtie, one store and two dwellings, brick veneer, Weston road, $3,600; J. W. Hoover, two-story brick house, Franklin avenue, $1,200.

ST. JOHN, N.B.—The St. John Railway Co., will receive tenders up to November 2nd for erection of car stable on Union street. Plans with F. N. Brodie, architect, 42 Princess street.—The Seamen's Mission board have decided to purchase a site in the west end for a new building for that organization, to cost $15,000.

HAMILTON, ONT.—The directors of the Y.M.C.A. propose to erect a four story building, 70 by 120 feet, as a boys' department, cost $30,000. — The Alexandra Pavillion & Rink Co., intend erecting a large rink on the site of the old Alexandra rink.—Mr. Barrow has reported on a sewer system for the east end annex, to cost $125,000.

REGINA, SASK. — The School Board have decided to erect an eight room school north of the track, cost from $30,000 to $40,000.— Plans have been prepared for the new warehouse on Dewdney street for the International Harvester Co., the building to be three story, brick, 80 by 200 feet. Work of construction will soon begin.

NEW WESTMINSTER, B. C. —A site has been purchased on Carnavon street for the new plant of the Dominion Pipe Co.—The City Council are considering the construction of concrete walk on Columbia street.—Joseph Armstrong intends extending his block on Columbia street, back to Clarkson street.— The Board of Managers of Columbian College have decided to erect a gymnasium in connection with that institution.

VICTORIA, B.C.—Sedger & Pownall, architects, will receive tenders up to October 31st for erection of a bungalow on Richardson street for Col. Herchmer. —It is understood that the site, corner Yates and Douglas streets, has been purchased for a new building for the Merchants Bank of Canada.—The by-law to raise $300,000 for proposed improvements in water system has passed the City Council and will be voted on November 1st.

MONTREAL, QUE.—The Sailors' Institute is to be remodelled and extensive additions built on an adjoining site, cost $50,000.—The Fire Committee are considering the supply of light, water and fire protection to Rosemount and other newly annexed municipalities.—Rodden & Egg, architects, have prepared plans for the new Turkish bath house, on Dorchester street building to be three story and basement, cost $100,000.

VANCOUVER, B,C,—A by-law will be voted on November 20th to provide for an addition to Lord Roberts school, cost $40,000. — Building permits have been granted as follows: A. E. Carter, addition to Y.M.C.A. building, cost $3,500; W. Acorn, dwelling, Sixth avenue, cost $1,500; B. C. Market Co., storage plant and store, Alexander street, cost $25,000.—It is reported that American capitalists are considering the erection of a large brewery near Hastings.

MONCTON, N. B.—Tenders will be received by D. Pottinger, general manager I. C. R., up to November 3rd for double tracking cotton factory branch, track laying in new yard between Kempt road and Windsor street, building a 36-stall engine house and removal and dredging out of pier No. 9, all at Halifax, N. S. Plans with Terminal Agent, Halifax, with Secretary, Department of Railways and Canals, Ottawa, Ont., and with Chief Engineer here.

WINNIPEG, MAN. — The Fire, Water and Light Committee will receive tenders up to November 5th for supply of two 250 h. p. water tube steam boilers for city waterworks. — The Women's Hospital Aid Society have agreed to build a convalescent home in connection with the hospital.—P. Lechtzier has purchased a site, corner King street and Dufferin avenue, for a large hotel and apartment block.—S. Mulvey has taken tenders for installing a hot water system of heating in School Board office.—The Dunlop Tire Co. intend establishing a branch factory here.—It is understood that the new terminal station for G. T. P. R. and C. N. R. will face on Main street and extend one third of length between Water and Assiniboine street.

EDMONTON, ALTA. — Building permits have been granted as follows: A. York dwelling, Thirteenth street, $2000; Great West Saddley Co., addition to building, $5000; C. Cowan, dwelling, Richard street, $1,400; A. Thorgrinson, dwelling, Syndicate street, $2500; Speers & McAfee, dwelling, Fourth street, $1200; Thos. Kennedy, dwelling, Sixth street, $1500; Agar Bros., hardware store. Namayo street, $5,000; Edmonton Ice Company, ice house, Curry street $2.400; John Somerville, three-story brick and stone building with cement basement, cost $28,000; W. A. Logan, residence, Eight street, cost $5,000; J. Fitzgerald, store First street, cost $2,500; Justice E. Lake, Namayo street, cost $2,000.

TORONTO, ONT.—Ellis & Connery, architects, are preparing plans for a residence on Palmerston boulevard for W. O. Forsyth.—Same architects have prepared plans as follows: A dwelling on Palmerston boulevard for H. Hudson; dwelling at Toronto Junction for T. Tennant; pair of houses on Muir avenue for Mr. Fuller; house for Mr. Doust.—The Consumers' Gas Co. intend erecting new retort house, purifying house, cokehouse, boiler-house, meter-house and condenser, cost $1,000,000.—Orr Bros. contemplate erecting a large building at 39 Queen street east, to extend through to Richmond street.—Hunter, Rose & Co. have purchased a site on Sheppard street for a

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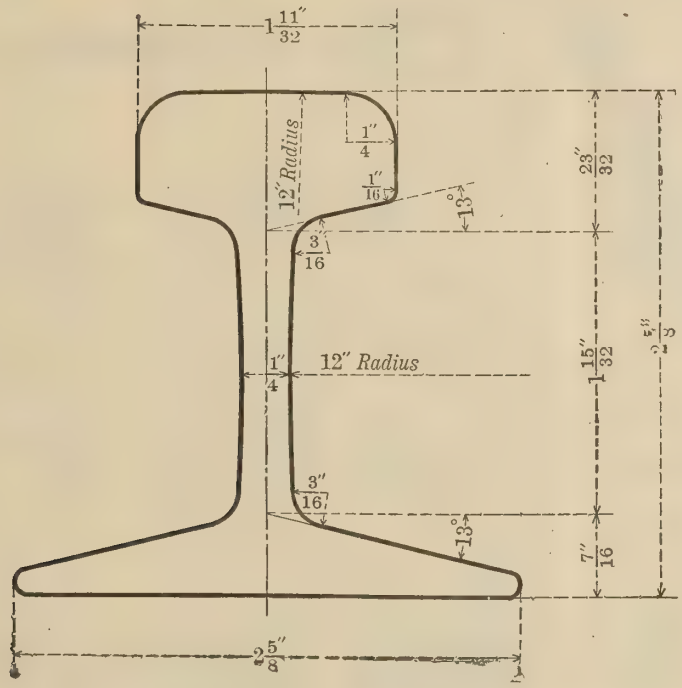

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MONTREAL

erge publishing house.—The Board of Control have decided to proceed with the erection of the new central fire hall on Adelaide street west.—W.A. Thompson, 88 York street, is calling for tenders for brick, stone and carpenter work of a large apartment house.—Tenders are wanted at 100 Bellevue avenue for plumbing, brickwork and plastering. — The Board of Control will receive tenders up to November 6th for construction of asphalt pavements on Widmer, Marion and Grace streets; brick pavement on Esther street; sewer in Alcorn avenue, and a number of concrete sidewalks; also, for erection of an iron fence at Alexandra park.—The Board of Control favor submitting a by-law to the ratepayers for construction work on sewer to be beyond Scarboro Heights. — Curry, Rolph & Sproatt, architects, have been chosen to prepare plans for the new hospital building.—G. W. Gouinlock, architect, Manager Orr, of Toronto Exhibition and a delegation from the City Council will inspect grand stands in the United States, before proceeding to rebuild the grand stand recently burned.—Tenders are invited for building a brick house. Plans at 84 Gerrard street west.—Plans are being prepared for the new morgue on Lombard street. The Medical Health Officer advocates the erection of an ambulance station in connection with it, cost $3,000.—Building permits have been issued as follows: W. D. Hurson & Son, 3 pair 2 story and attic brick dwellings, Springhurst avenue, cost $15,000; C. Coulter, three 2 story brick dwellings, Beatrice street, cost $7,000; A. A. Kennedy, 2 pair 2½ story brick dwellings, corner Euclid avenue and Bloor street, cost $10,000; Farmer's Bank of Canada, 1 story brick bank, corner Bay and Adelaide streets, cost $10,000; G. Saul, 2½ story brick dwelling, Lindsay avenue, cost $3,000; E. Taylor, 2 pair brick dwellings, Dovercourt road, near Dewson street, cost $10,000; A. A. Barthelmes, 2½ story brick dwelling, Palmerston boulevard, cost $6,000; J. W. Devitt, pair 2 story and attic brick dwellings, 653 and 655 Bathurst street, cost $6,000; G. E. Alexander, 2 pair 2 story and attic brick dwellings, Roxborough street west, near Yonge, cost $7,000; S. Crane, 2 story and attic brick dwelling, St. George street, near Bernard avenue, cost $8,000; A. E. Humphrey, 2 story and attic brick dwelling, Palmerston boulevard, cost $5,000; Wm. Avery, pair 2 story brick dwellings, Lansdowne avenue, cost $6,000; A. McColl, 2 story and attic brick dwelling, Gladstone avenue, near Hepbourne street, cost $2,800; White & Co., pair 2 story and attic brick dwellings, 644 646 Markham street, cost $6,000; Walter Nash, six 2 story brick dwellings, Lansdowne avenue, near Dundas street, cost $12,000; Dr. B. E. Hawke, 2 story and attic brick dwelling, 23 Wellesley street, cost $8,000; Booth Copper Co., 1 story brick and iron factory, 115 Sumach street, cost $5,000; Adams Furniture Co., 4 story brick warehouse, 227-233 Victoria street, cost $30,000; N. Stewart, 2 story and attic brick dwelling, Dundonald street, cost $4,000; H. J. & E. R. Reynolds, three 2 story brick dwellings, Dundonald street, cost $13,500; T. A. Mix, 2 story brick dwelling, 75½ Beaconsfield avenue, cost $2,500; Henry Cawthra Estate, 2 story brick alterations to dwelling, 132 St. George street, cost $1,500; W. O. Forsythe, 2 story and attic brick dwelling, Palmerston boulevard, cost $5,500; Deeth & Sons, 2 story brick store and dwelling, corner Montrose avenue and Arthur street, cost $2,300; Mrs. J. E. Murphy, 2 story and attic brick dwelling, 10 Rowanwood avenue, cost $8,000; Geo. C. Craig, 2 story and attic brick store and dwelling, Bloor street, near Lansdowne avenue, cost $4,500; Love Bros., 2 pair 2½ story brick dwellings, Bain avenue, cost $12,000; Love Bros., 2 pair 2½ story brick dwellings, Victor avenue, cost $12,000; Herbert Glover, pair 2 story brick dwellings, Muir avenue, cost $4,000; Joseph Price, 2 story brick dwelling and workshop, 363 Spadina avenue, cost $4,500; G. A. Weismiller, 2½ story brick dwelling, Lansdowne avenue, cost $5,000; W. Field, 2 story and attic brick store and dwelling, College street, near Montrose avenue, cost $4,700; C. W. Chadwick, three 2 story and attic brick dwellings, Crawford street, cost $9,000; R. White, 3 story brick store and dwelling, 84 Queen street east, cost $2,800; George Hogarth, 2 story and attic brick dwelling, Hogarth avenue, cost $3,500; Harry Weinert, pair 2½ story brick dwellings, William street, near Anderson, cost $4,500; Stewart Hartshorn Co., two 1 story storage sheds, corrugated iron, River street, near Queen, cost $4,000; W. B. Chamion, pair 2½ story brick dwellings, Gladstone avenue, near College street, cost $5,000; Chas. F. Wagner, 2 story and attic brick dwelling, Dundonald street, cost $4,000; T. A. F. Fleming, 2 story brick dwelling, Boustead avenue, cost $2,500; Robert Northey, 2 story brick dwelling, Forest Hill road, cost $9,000; Dr. J. H. Hamilton, 2 story and attic brick dwelling, 220 Bloor street west, cost $5,000; Chapman Double Ball Bearing Co., 1 and 2 story brick factory, Sorauren avenue, cost $10,000.—Mr. Reynold, 77 Victoria street, is asking for tenders for plumbing, hot water heating, stone and brick work, etc., for a house.—Tenders are wanted at 567 Bathurst street for brick work on a pair of houses. —The plans for the new Normal school buildings will be altered with a view to reducing the cost, so that it will not exceed $50,000 each.

FIRES.

Storage sheds of Regina Paving Block Co., Regina, Sask., damage $2,000.—Residence of M. Hemingway, Unionville, Ont., loss $5,000.—Ore Hill five stamp mill, near Ymir, B. C., loss $7,000.—Plant of Wm. Davis Co., Front and Beachell streets, Toronto, damage $6,000. Bank head and machine shop of Reserve Mine of Dominion Coal Co., near Glace Bay, N. S., loss $5,000.—Wash house at Michel, B. C., completely destroyed, loss $5,000.—Plant of Construction & Paving Co., North Toronto, damage $35,000.—Lakeview Hotel, at Portsmouth, Ont., loss $4,000.—Imperial Hotel, Canora, Sask., loss $12,000.—Hotel Venise and other buildings, River du Loup, Que., loss $10,000.—Power plant, cutting machinery and building at Mickle, Dyment & Son's woodyard, Barrie, Ont., loss $2,000.—Building of Dyment Foundry Co., Barrie, Ont., loss $80,000.

CONTRACTS AWARDED.

WEYBURN, SASK.—$5,000 town debentures: Nay, Anderson & Co., Regina, purchasers.

PINCHER CREEK, ALTA.—$10,000 town debentures: Union Bank of Canada, purchasers.

MILESTONE, SASK.—$11,000 school debentures: Nay, Anderson & Co., Regina, purchasers.

SWAN LAKE, MAN.—$7,000 school debentures: Nay, Anderson & Co., Regina, purchasers.

MOUNT FOREST, ONT.—Extension of waterworks system: J. P. Noonan, successful tenderer, at $3,490.

HAWKSHAW, N.B.—Construction of substructure of bridge: Whitman Brewer, St. Mary's, contractor, cost about $31,000.

ST. JOHN, N. B.—Erection of addition to York cotton mill: Carpentry, A. E. Hamilton; brickwork, B. Mooney & Sons.

LIVERPOOL, N. S.—Construction of new line of Liverpool & Milton Railway Co. to Milton: Lindsay Construction Co., contractors.

AMHERSTBURG, ONT.—Construction of cement sidewalks on North street and Maple avenue: Pettypiece Silex Stone Co., contractors.

QUEBEC, QUE.—Construction of three brick houses on Maple avenue, for L. F. Burroughs: Cauchon & Fres, and C. Jobin, contractors, cost $9,000. Ouellet & Levesque, architects.

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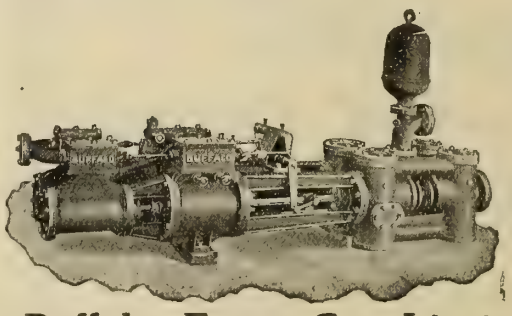

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EDMONTON, ALTA.—The City Council have decided to purchase a De-Carey incineration, cost $40,500.—Erection of C. M. C. A. building: May-Sharpe Construction Co., contractors, cost $20,000.

HAMILTON, ONT.—Erection of new patrol station: Carpentry, Hugh McKellar, $277; lathing and plastering, James McKee, $280; painting, Geo. Smith, $28; electric wiring, Chadwick Bros., .50. Plumbing and heating not arded.

TORONTO JUNCTION, ONT.—Extension of Dominion Carriage factory: Carpentry, Thomas Sproul; brickwork, Elgie & Page. Ellis & Connery, architects, Toronto.—Erection of factory for Francis-Frost Co.: Brickwork, Teagle & Son; carpentry, F. Armstrong. Ellis & Connery, architects.

TORONTO, ONT.—Amendments of the tenders for work at Rosedale school have been awarded as follows: Mason work, Wickett Bros., $7,769; carpenter work, Frank Armstrong, $8,269; plastering, T. Gander & Son, $1,055; painting, Taylor & Co., $790; plumbing, Fred Armstrong, $559; tinsmithing, G. M. Bryan, $234; roofing, R. Rennie & Son, $525; heating and ventilating, W. F. Rutley Co., $2,295.

Mr. John L. Harrington, chief engineer of the Locomotive & Machine Co., Montreal, will at the beginning of 1907 enter into partnership with Dr. J. A. L. Waddell, the firm to be known as Waddell & Harrington, consulting engineers, with head quarters at Kansas City. Dr. Waddell is at present member of the firm of Waddell & Herrick, which is being dissolved.

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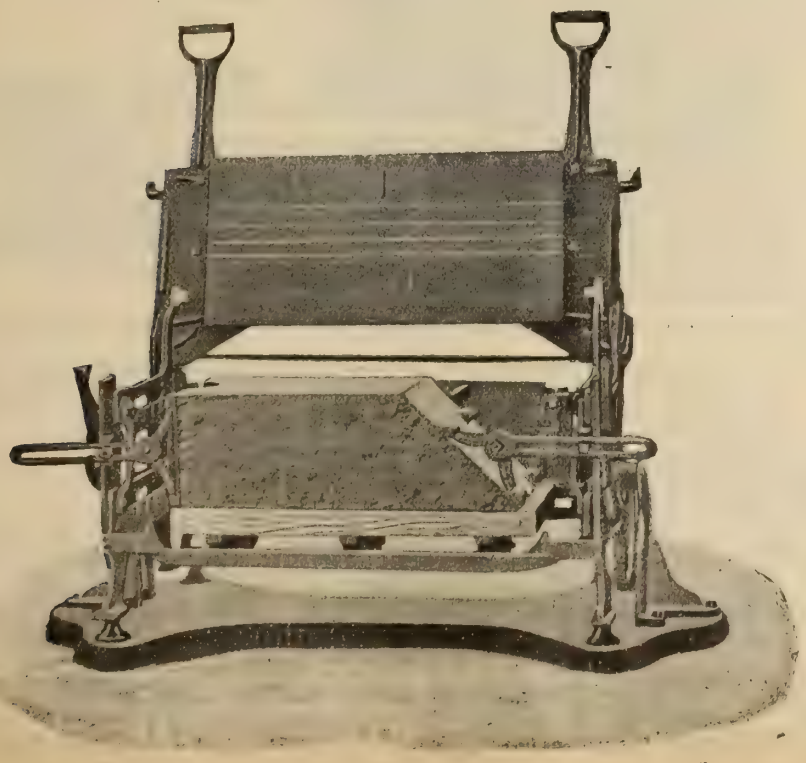

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Niagara Falls, - Can.

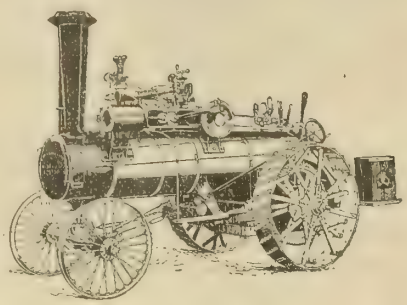
NEW PIPE COMPANY.

A new company, to be known and incorporated as the Dominion Wood-pipe Company has been organized in Vancouver, B. C. The company has already made a purchase of land in the city of New Westminster, covering five lots in all and equalling an acre in extent, which will be the sité of their plant. The building will include a factory, dry kiln, sheds and loading platform. The C. P. R. is putting in a siding sufficient to accommodate ten cars at once. The demand for wood-pipe has been so extensive during the past year or so, that the promoters of the new company feel that the time has come for the installation of a plant of larger capacity.

The new company has a new style of coupling and also new departures in the methods of dipping. They hope to be in full operation by the beginning of the year, at which time they promise the public a fuller description of their plant and product. The present temporary offices of the Dominion Wood-Pipe Company are in the Fee Block, Vancouver, B. C.

D. DeLadurantaye & Fils is the name under which David DeLadurantaye and Louis N. DeLadurantaye, masons, Montreal have registered their business.

Jules Renand and Victor Morin, contractors, Montreal, have registered their business under the name Renand & Morin.



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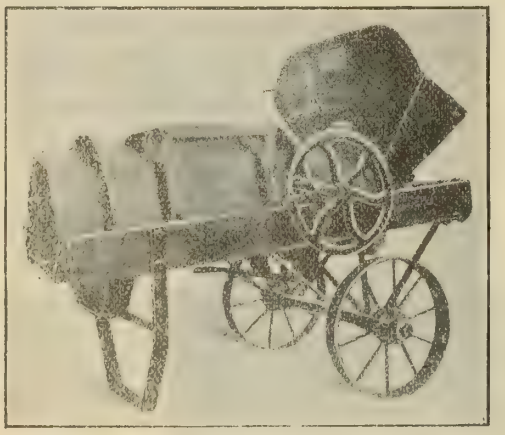

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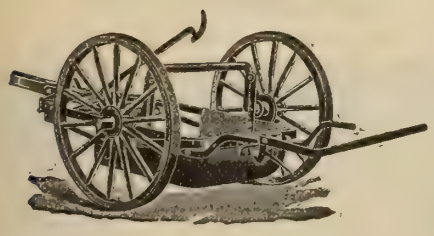

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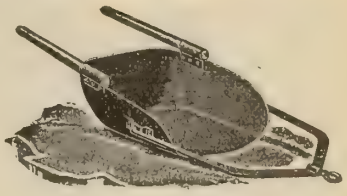

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THE LATE W. T. JENNINGS, C.E.

Mr. William T. Jennings, of Toronto, the widely known consulting engineer, died of paralysis, at Lansing, Mich., on Wednesday, October 24th. He was in Lansing inspecting the lines of the Michigan United Railways, and was a guest of Mr. J. R. Elliott, manager of that road, when his death occurred. Mr. Jennings was one of the best known civil engineers on the American continent. His experience began on the old Great Western Railroad. During the construction of the Canadian Pacific Railway, he had charge of section B, with headquarters at Rat Portage, (now Kenora.) Afterwards he was given charge of a section stretching eastward from the Pacific coast 350 miles, a piece of work requiring great engineering skill, but which was successfully completed.

On the completion of the road, Mr. Jennings was appointed chief resident engineer of the western division, with headquarters at Toronto. He held this position until 1890, when he resigned to become city engineer of Toronto. This position he resigned, two years later to engage in a consulting practice.

As a consulting engineer, Mr. Jennings was much sought after and made reports on several important Government works, such as Halifax and Esquimanlt docks. At the time of his death he was preparing a report on Louise Basin at Quebec. He was also chief consulting engineer for the Toronto and Niagara Power Company. He made the preliminary survey of the James Bay and Temiskaming Railways, Mr. Jennings is credited with being the first man to apply electricity to long distance transmission in Canada. And besides the valuable services rendered in connection with Canadian works, he was also consulted on similar matters to some extent in the United States.

THE LATE W. T. JENNINGS, C. E.

Mr. Jennings was a member of the Institute of Civil Engineers, Past President of the Canadian Society of Civil Engineers, an honorary examiner at the School of Practical Science, and a member of the Engineers' Club of Toronto.

Mr. Jennings had reached the age of sixty. He was born in Toronto, a son of Rev. Dr. Jennings, for many years minister of the old Bay Street Presbyterian Church, and was educated at Upper Canada College. One son, Gorden T. Jennings, survives him. His wife predeceased him by several years.

It is said of Mr. Jennings, that none lived up to a higher sense of professional honor than he.

PAINTING CEMENT.

The following method of paintiug a cement wall was described at a recent convention of master painters. The building had become discolored in places and the joints were of a different color from the surface of the blocks. Two parts of Portland cement were mixed with one part of marble dust and mixed with water to the consistency of thin paint or a thick whitewash. The wall must be well wetted before the application of this paint and kept constantly wet while the material is applied, and then must be kept wet for a day longer, in order to make the cement wash adhere to the cement surface. The waah was applied with ordinary whitewash or calcimine brushes, a man was kept busy playing a hose on it while the work was being done. The whole secret of success lay in keeping the wall constantly wet. A price could not well be quoted on such work, but on a scaffolding job, it should be worth not less than a dollar a yard.

A well-known painter, who is one of the largest contractors in the country, in commenting on this, said the he had frequently been called upon to paint the cement panels in half-timbered houses, and the best material he could find for the purpose was an English material known as Duresco. This comes in paste form and is thinned with water to the consistency of thin cream and to this a little of a so-called "petrifying liquid" made by the manufacturers is added. This material is the same color when it is wet as when it is dry—differing from ordinary water paints in this respect. It can also be used on pressed brick fronts. The results are said to be as durable as oil paint, without the gloss of that material, and consequently well adapted for painting cement work. The same material is sold in this country under the name of Onresco,

NOTES.

The firm of E. Gervais & Co., painters, Quebec, Que., has been dissolved.

Mr. G. A. Proctor, a prominent contractor, has announced his intention to run for mayor of Sarnia, Ont.

Emile Authier and Phillippe Gauthier, builders, Montreal, have registered under the name of Authier & Gauthier.

The contracting business of George Montford and Hubert Morris, Montreal, has been registered under the name of Montford & Morris.

Mr. Thos. J. Aris, a prominent contractor of Toronto Junction, Ont., died at his residence, 136 Mulock avenue, on October 21st, at the age of fifty-nine years. Mr. Aris had resided in that town for many years and was contractor for erection of the town hall building.

GERMAN ALSEN, at higher prices than competitors has again this year been awarded the most important contracts of the World because practical tests by leading Engineers proved its merit and relative economy. Note the following:

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REINFORCED CONCRETE CONSTRUCTION.

In a recent interview with Mr. R. H. Haas, general superintendent for the Dominion Engineering & Construction Company as to the possibilities of reinforced concrete for building construction, Mr. Haas said :—

"Canada will have a boom in building construction in the next two years which will even surpass the predictions of the optimist. This will be especially the case in reinforced concrete. The natural ingredients which constitute the concrete are very favorable to this most durable and fireproof construction. Where the owners employ an experienced firm the results will be most satisfactory. Experience in this mode of construction means everything."

Mr. Haas was amongst the first to see the possibilities of reinforced concrete construction properly handled. To obtain this end he associated himself with the Ransome & Smith Company, later with the R. A. Cummings Company, the Continental Concrete Company, Frank B. Gilbreth and the Underwriters Engineering & Construction Company of New York. Now the whole outside construction force and construction itself of the Dominion Engineering & Construction Company, is under his supervision. Mr. Haas is a practical man and looks at concrete from a practical and economical standpoint.

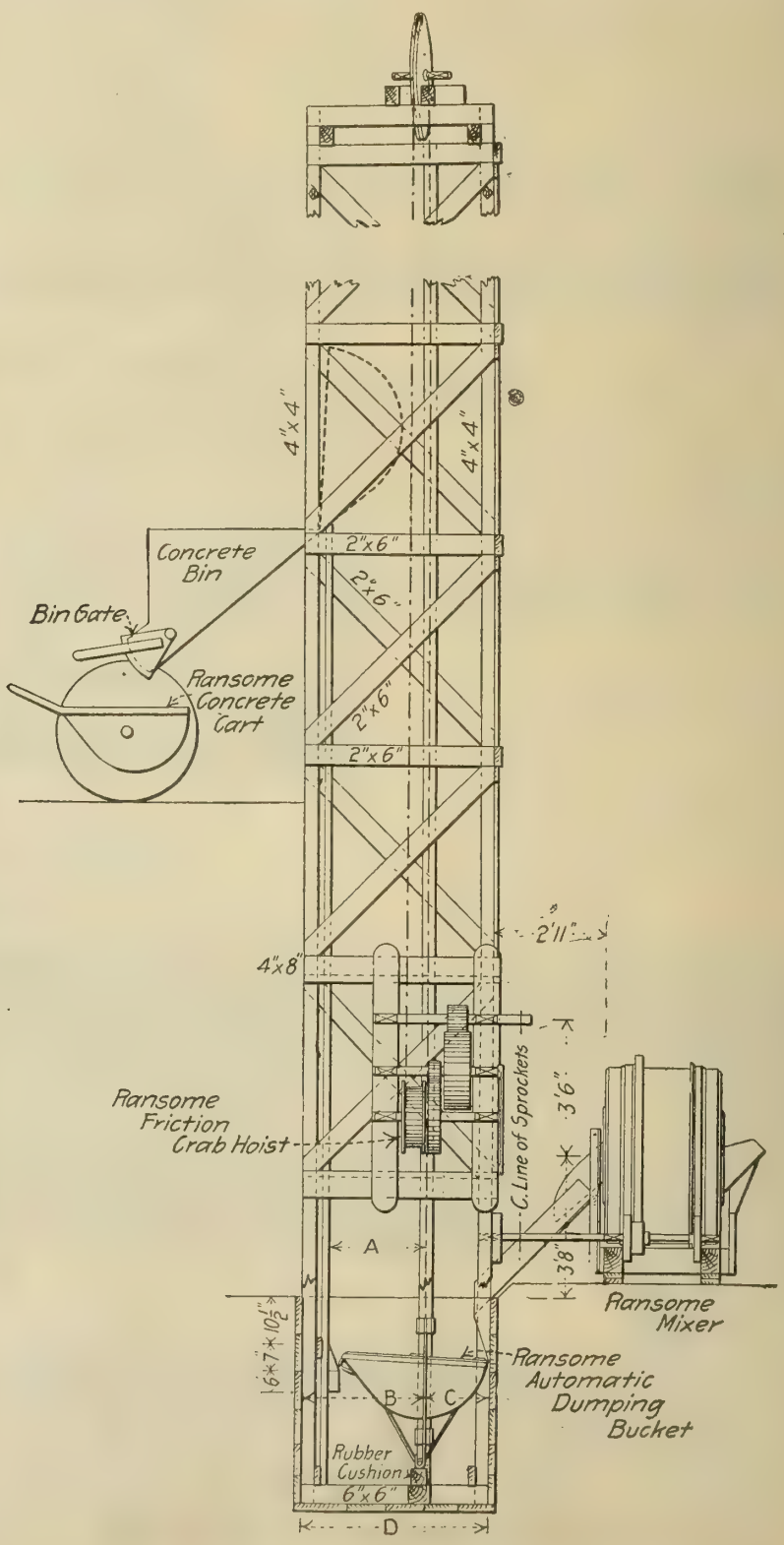
Mr. Haas has studied in the United States and Germany. Some of the most important concrete buildings in the United States show his skill and the possibilities in reinforced concrete as a building material.

The Dominion Engineering and Construction Company, is at present constructing the American Tobacco Company's new plant in Montreal, the Berliner Gramaphone Company's, new factory, the transformer house for the Canadian General Electric Company, and machine shops for the Canada Foundry Company. All works which show that experienced men are in charge of the work.

The concrete on all those large contracts is thoroughly mixed in Ransome concrete mixers, which are considered as among the most up-to-date and efficient for thorough and speedy work. After the concrete has passed through the mixer it is handled by a hoisting outfit as illustrated, which is suitable for use

MR. R. H. HASS
General Superintendent Dominion Engineering & Construction Company.

MR. H. F. HAAS
Superintendent Dominion Engineering & Construction Company.



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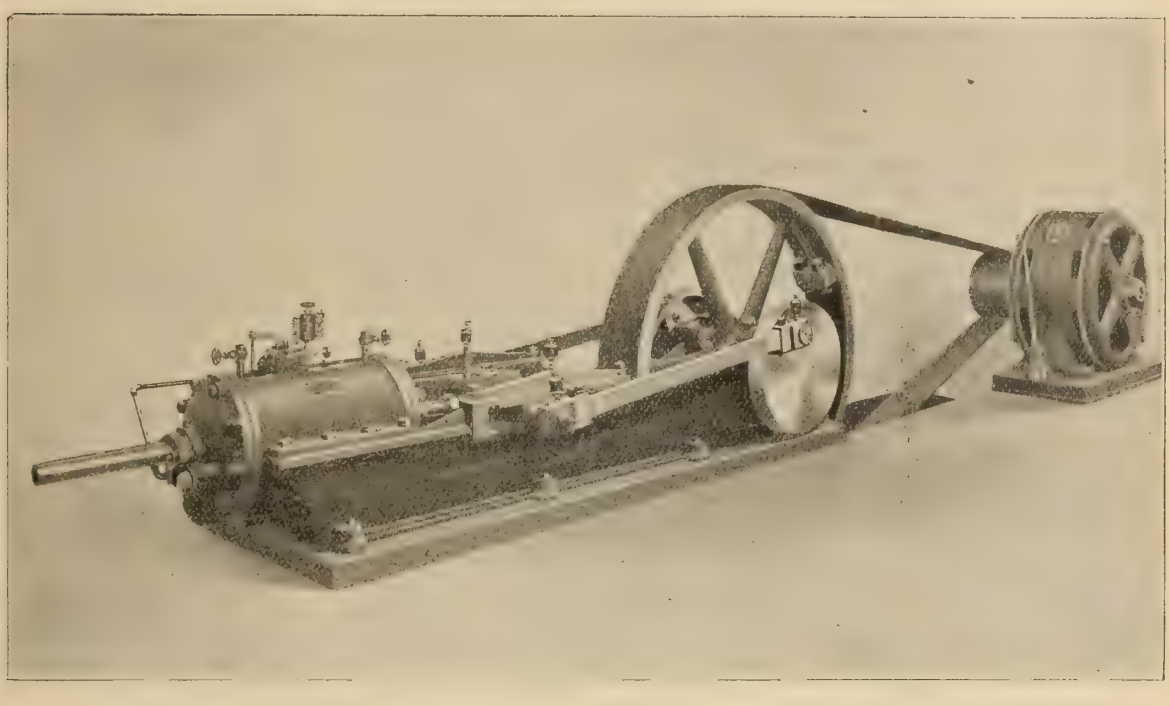

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on reinforced concrete buildings.

The hoisting bucket and the concrete mixer shown, have the same batch capacity. The mixer discharges its full batch into bucket, which is then hoisted and discharged automatically into the concrete bin at any desired point. The concrete can then be drawn from this bin as needed. The hoisting bucket is loose in its hoisting frame and is free to swing about its lowest point. The nose of the bucket rides against a 2x6 runner, which prevents dumping until the bucket reaches end of board.

All the labor in wheeling the concrete from mixer to material elevator and in bringing the empty barrows back to the mixer is thus done away with. The ordinary way of hoisting the concrete, one wheelbarrow at a time, chokes down the capacity of the mixer, for for the amount of concrete mixed depends necessarily upon the rapidity with which it is hoisted. In the hoisting outfit illustrated the output from the mixer is limited only by the speed of the wheelbarrow men in taking concrete away from the bin.

On the Dominion Engineering & Construction Company's contracts throughout the Ransome concrete mixers and the Ransome outfits are used successfully.

The American Tobacco Company's new factory in Montreal is nearing completion, and is a beautiful example of reinforced concrete construction. Mr. H. F. Haas is superintendent on this contract, and under his supervision great progress is shown each day.

THE CONSTRUCTION OF THE DETROIT TUNNEL.

The contract for the construction of the Detroit River double-tube tunnel of the Michigan Central has been awarded by the Detroit River Tunnel Company to Butler Bros.-Hoff Company, of New York city. The contract calls for the completion of the tunnel by June 1, 1909, and the work is already under way. As the tunnel will be built according to a modification of the design suggested by Mr. Wilgus, vice-president of the New York Central, and head of the advisory board, which design involves a new departure in subaqueous tunneling methods, further details of the final, modified plan are here presented.

The design of Mr. Wilgus is a trench method. In accordance with the plan, before sections of the steel tunnel tubes are floated into place, and immediately after the dredging for the section has been completed, piles are to be driven in the bottom of the dredged channel and cut off at the proper height (or an inch or so below, to permit shimming). These piles are to be capped with steel beams to receive the tubes. When the piles are driven, the bottom of the channel to the level of the top of the beams is to be filled with a layer of material of suitable consistency and bearing power, for twelve to eighteen inches in thickness, or as much more as may be necessary to fill in holes or depressions left in the bottom of the trench by the dredging operations. This layer will form a blanket between the bottom of the trench and the concrete to be deposited around the steel tubes. For this layer, sand and gravel will be used, with the addition of cement where necessary.

In the trench and upon the steel beams and bed of gravel and concrete will be sunk tubes of plate steel ⅜-inch thick, and weighing an average of 15.3 pounds per square foot. The steel tubes will be built in lengths of 263 feet, or in such lengths as are found most convenient to handle. The plates will be lap-jointed with a double row of ¾-inch diameter rivets, the outside edges being beveled and caulked so as to be absolutely water-tight. The steel tubes are to be reinforced on the outside, about every twelve feet, by diaphragms, which will serve the purpose of a cradle in sinking the tubes to their permanent position. On the inside, midway between the diaphragms, the tubes are to be reinforced with a stiffened angle, to which will be attached temporarily, radial rods of one-inch diameter, though these rods may be dispensed with if it shall be found that they are not needed. The ends of the tubes are to be reinforced with similar radial rods, to prevent deformation during handling. The steel in the tubes is to be of the grade of "railway bridge steel," with an ultimate tensile strength of 55,000 to 65,000 pounds per square inch.

The tubes will be sunk separately or in pairs, from scows properly anchored for the purpose, or from temporary platforms, supported on piling. The greatest care will be exercised to see that they are not overstrained in the handling, so as to cause leaks in the joints. When in position to be sunk, the tubes will be lowered in a slow and careful manner, so as always to be in complete control. The piles in the trench will always be in such positions that one of the diaphragms of the tube will rest upon the beam when the tubes are in place. Each tube, or pair of tubes, is to be provided with a detachable upright at each end, firmly braced to the tube, and of sufficient length to indicate the position of the tube when sinking. These uprights will also serve the purpose after the tube is sunk to adjust its position laterally, so as to bring the sections into alignment. The uprights will, therefore, extend ten feet above the water, after the tube is in position. When the tubes are concreted in, these uprights will be removed and used again. When the tubes are adjusted laterally to their correct position, divers will examine all bearing of the tubes on the beams in the bottom of the trench, and will insert shim plates of proper thickness to produce exact bearings.

Each tube when manufactured will be fitted with a sleeve at one end which can slip over the end of the adjoining tube previously sunk. The sleeve is to be provided with a flange of the adjoining tube, a rubber gasket being placed between the two. A similar rubber gasket is to be provided at the inner end of the sleeve bearing up against the edge of the next tube. In bolting up the flanges, which must be done by divers, the rubber gaskets must be squeezed together between the ends of the tubes to form a tight joint. A space three inches by eighteen inches is thus formed all around the tube at the joint. This space will be filled with a grout of pure cement. To this end each sleeve will be provided on top with two small pipes (flexible pipes and joints,) leading to the scow floating above. With a force pump each joint will be tested to ascertain whether it is tight by closing one pipe and forcing water through the other. When the joint has been made reasonably tight pure cement grout will be pumped into it through one pipe until it comes out through the other as evidence that it is completely filled.

In order to assist in making an exact connection between the tubes each tube will be provided with two pilot pins with taper points that fit into bell-shaped sockets fastened to the adjoining tube. Ween the tubes are sunk and pulled into place these pilot pins will guide the tube to its exact position for connecting up. Before each tube or set of tubes is launched the corresponding end of the next tube will be fabricated and all flanges, rubber gaskets, bolts and pilot pins with sockets, fitted together, so that when connected up they will fit accurately.

The ends of the tubes at the joints are further to be fitted with flange angles on the inside for the purpose of caulking between them should the joints be found to leak. These flange angles are then to be connected with bolts drawn up tight and a suitable caulking material forced in between such angles to make the joint tight. These angles will not be connected where the joints are found tight and acceptable.

A wooden form is to be bolted to the outer flanges of the diaphragms of each pair of tubes in order to confine the concrete deposit around the latter. This form is to consist of rough planks of yellow pine, white pine, spruce or other timber, three inches in thickness and eight to twelve inches in width securely bolted to the flanges of the dia-

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ACCIDENT INSURANCE
Page
Ontario Accident Insurance Co. 19

BLUE PRINTS
Electric Blue Print Co. 7

BLOWERS
Buffalo Forge Co. 4

BRIDGES (CONCRETE)
Steel Concrete Co. 15

BRIDGES (STEEL)
Canadian Bridge Co. 19
Canada Foundry Co. 23
Dominion Bridge Co. 15
Jenks & Dresser 16
Phoenix Bridge and Iron Works 15

CEMENT
Alsen Portland Cement Co. 9
Bremner, Alex. 6
Currie & Co., W. & F. P. 20
DeSola, C. I 7
Gray & Bruce Portland Cement Co. 21
Hyde & Co., F. 22
Hanover Portland Cement Co 19
Lakefield Portland Cement Co. 14
McNally & Co., W. 7
Morrison & Co., T. A. 20
Morgan, T. M. 15
National Portland Cement Co 18
Owen Sound Portland Cement Co. 8
Ontario Portland Cement Co. 16
Raven Lake Portland Cement Co. 20
Stinson-Reeb Builders' Supply Co. 17
Toronto Pottery Co. 22
Thorn Cement Co. 14

CONCRETE MIXERS AND MACHINERY
Dartnell, E. F. 6
Hopkins & Co., F. H. 24
Ideal Concrete Machinery Co. 18
Mussen & Co., W. H. C. 3
Morrison & Co., T. A. 20
Toronto Pressed Steel Co. 7
Vining Bros. Mfg. Co. 5

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Peat & Sons, James 14
Toronto Pressed Steel Co. 7

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Ambursen Hydraulic Construction Co. 7
Loignon, A. & E. 7
Steel Concrete Co. 15

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Zarossi, Banco 15

CORRUGATED IRON
Metallic Roofing Co. 5
Pedlar People 22

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Allis-Chalmers-Bullock 11
Beatty & Sons, M. 22
Dartnell, E. F. 6
Hopkins & Co., F. H. 24
Mussen & Co., W. H. C. 3
Morrison & Co., T. A. 20

DEBENTURES
Nay, Anderson & Co. 22
Stimson & Co., G. A. 21

DRILLING CONTRACTORS
Page
Harvey, J. 20
Peat & Sons, James 14

ENGINEERS AND CONTRACTORS
British Columbia General Contract Co. 23
Canadian White Co. 6

ENGINEERS (CIVIL)
Archibald, George H. 15
Chipman, Willis 17
Connor, Clarke & Monds 17
Davidson, Shirley 21
Davis, Johnston 15
Fielding, John S. 7, 13, 17
Galt, John 7
Jackson, John H. 17
Lea & Coffin 17
Leofred, A. 21
McConnell, Brian D. 13
McDougall & McRae 7
Parke, Roderick J. 17
Scott, Wm. Fry 21
Simpson, T. T 21

ENGINEERS (MECHANICAL)
Farmer, John T 21
Galt, John 7

ENGINES
Cameron & Co, Hugh 16
Sawyer & Massey Co 6

ELECTRICAL APPARATUS AND SUPPLIES
Allis-Chalmers-Bullock 11
Drummond, McCall & Co 14
Northern Electric & Mfg. Co. 4

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Cameron & Co., Hugh 16
Meadows, George B., Toronto Wire, Iron & Brass Works Co. 9
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Hood & Sons, Wm 19
Hopkins & Co., F. H. 24
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McDougall Co., R. 21

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Locomotive & Machine Co. 15
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Sessenwein Bros 7

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Hood & Sons, Wm. 19
Russell, John E. 19

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Brunet, Joseph 17
Forest City Paving Co. 17
Nash Road 20
Ontario Asphalt Block Co. 17
Silica Barytic Stone Co. of Ontario 15
Warren Bituminous Paving Co. 7

PIPE (WOODEN)
Canadian Pipe Co. 9
Pacific Coast Pipe Co. 20

PIPE (CONCRETE)
Page
Dominion Concrete Co. 6

PUMPS AND PUMPING MACHINERY
Allis-Chalmers-Bullock 11
Canadian Buffalo Forge Co. 4
Canadian Fairbanks Co. 20
Canada Foundry Co. 23
Drummond, McCall & Co 14
Mussen & Co., W. H. C. 3
McDougall Caledonian Iron Works Co., John 19

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Canada Foundry Co. 23
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phragm with ⅝-inch bolts. The form is to be finished on top with a string piece. In the preparation of the concrete for the tunnel filling it is provided that gravel may be used in place of crushed stone.

In order to enable the contractors to begin lining the tubes before the sections are sunk all the way across the river, some of the tubes may be provided with bulkheads to keep out the water when the tubes laid are being pumped out. Such bulkheads will necessarily be of ample strength to take the full hydrostatic pressure coming upon them. A common pump for two tubes or a separate pump for each tube will be constructed complete with pump chamber and work incidental thereto.

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Two Lakes Copper Mining Company, Limited, Sowerby, Ont., incorporated, capital $500,000. Directors C. W. Coulter, L. L. Lucas, J. P. Russell, J. C. Wilkins, all of Oil City, Pa.

Detachable Boiler Flue Manufacturing Company, Limited, Winnipeg, incorporated, capital $150,000. Promoters, F. C. Bell, J. Y. Griffin, W. E. Skinner, G. A. Metcalfe and others.

McLean, McKeown Company, Limited, Winnipeg, incorporated capital $20,000, to engage in lumber business, construction contracting, etc. Promoters D. H. McLean, D. McKeown, A. W. Jones and others.

Rawdon Lumber Company, Limited, Rawdon, Que., incorporated, capital $49.000. Promoters T. Belanger, Valleyfield, Que., A. Belanger, J. U. Emard, Montreal, and others.

Canndian Carbide Company, Montreal, incorporated, capital $25,000. Promoters E. Languedoc, W. J. Henderson, A. C. Calder, J. Jenkins and C. T. Jette.

Beck-Iden Acetylene Lamp Company, Montreal, incorporated, capital $100,000. Promoters E. Languedoc, W. J. Henderson, A. C. Calder, J. Jenkins and C. T. Jette.

City of Cobalt Mining Company, Limited, Cobalt, Ont., incorporated, capital $500,000. Directors T. M. Birkett, W. D. Hogg, T. W. A. Lindsay and A. A. Taillon, all of Ottawa.

Harry Becker and Louis Cohen, carpenters, etc., Montreal, have registered their business under the name of H. Becker & Co.

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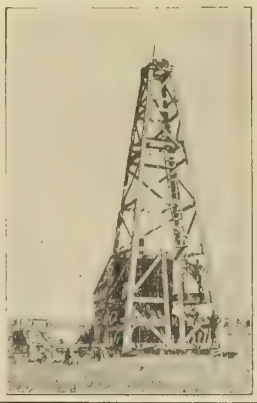

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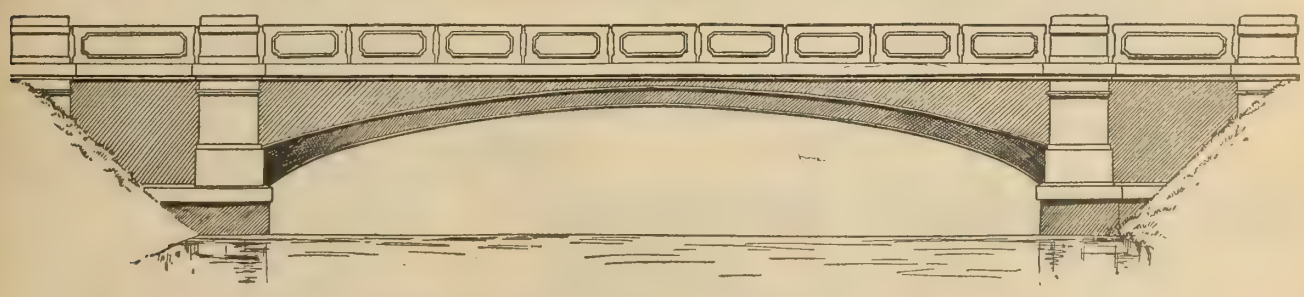

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Pascal Dambrosio and Nicholas Wendura, contractors, St. Louis, Que., have registered under the firm name of Dambrosio & Wendura.

Reid, MacGregor & Reid is the firm name under which the contracting business of John B. Reid, John MacGregor and James A. Reid, Montreal, is registered.

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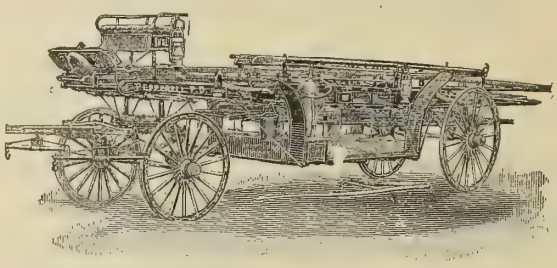
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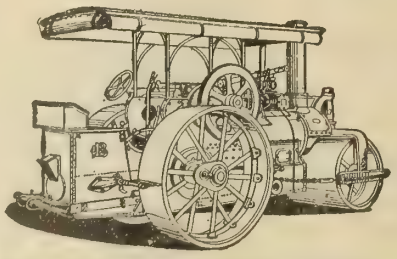
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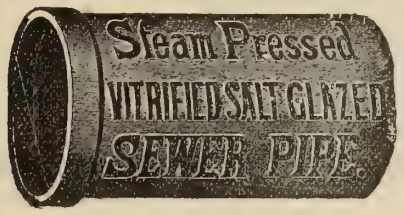

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The partnership of Chopin & Aubuchon, contractors, Montreal, has been dissolved.

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							Neat.					3 (Sand) to 1 (Cement)				
					Initial	Final	1 dy.	7 dys.	28 dys.	3 mos.	1 yr.	1 dy.	7 dys.	28 dys.	3 mos.	1 yr.
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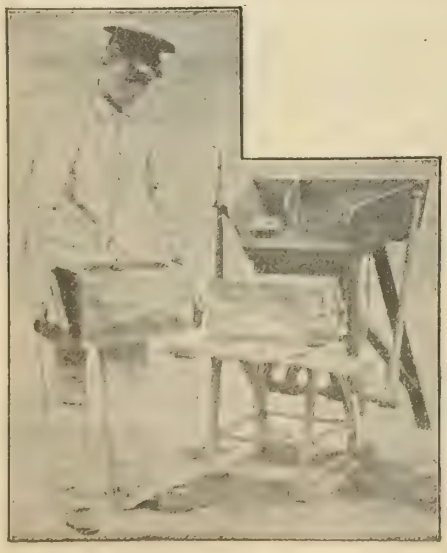

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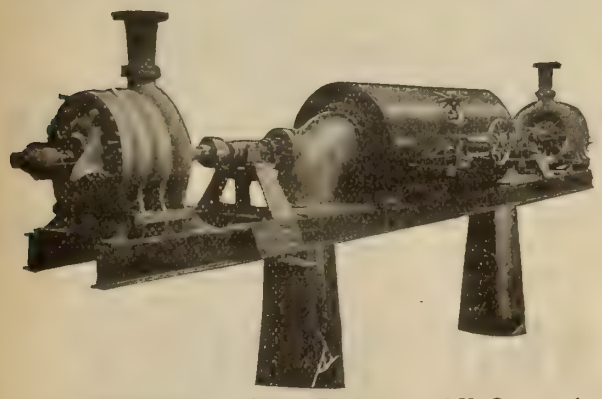

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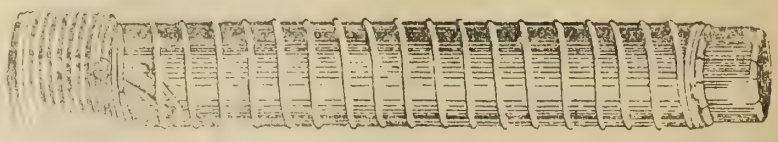

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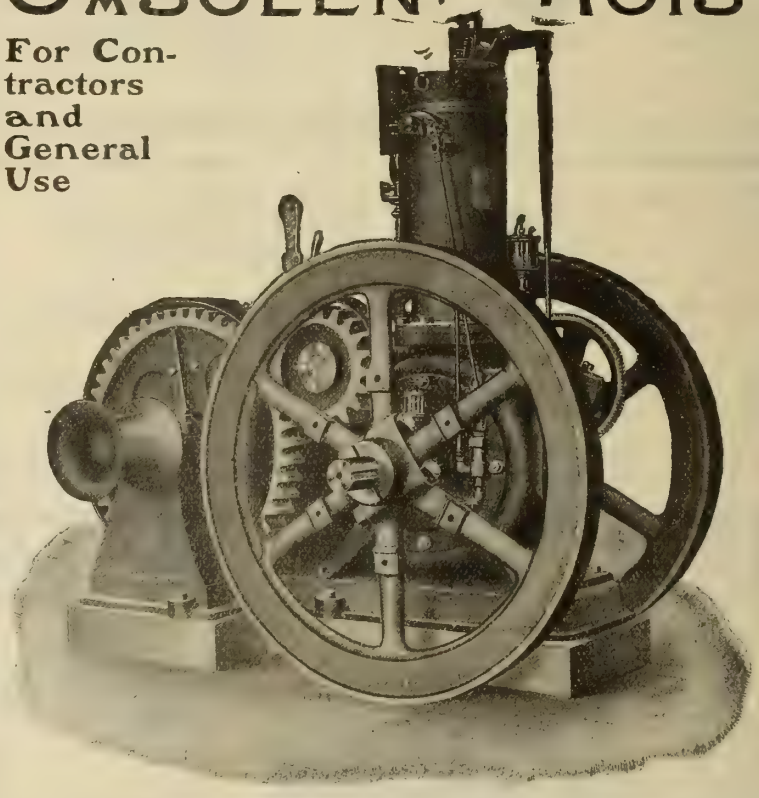

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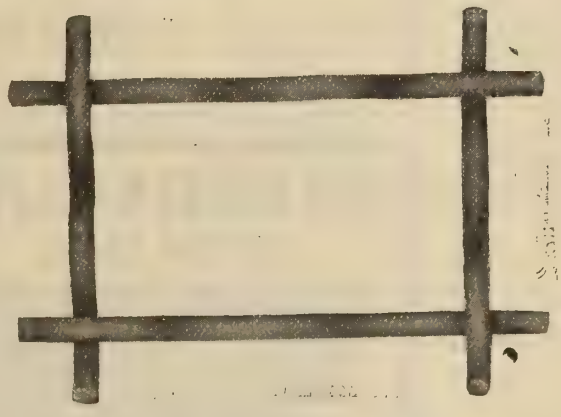

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TORONTO PRESSED BRICK AND TERRA COTTA WORK

	F.O.B. Milton, Ont.
Red No. 1	$13 00
" 2	11 50
" 3	10 00
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" 2	13 00
Brown	25 00
Roman Red	30 00
" Buff	35 00
" Brown	40 00
Hard Building	8 00
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Moulded and Ornamental from $2.00 to $5.00 per 100.
Terra Cotta String Courses and Frieze, from 50c. to $2.00 per ft. run.
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Nos. 1, and 2, Red Pressed Bricks
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Ornamental Bricks of all kinds for Mantel purposes
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Vitrified Street-Paving Bricks
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Common Stock Red and Grey Bricks
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Stone or Macadamized Roadways

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BEAMSVILLE BRICK AND TERRA COTTA CO.

	F.O.B. Beamsville.
Red Peerless Facing	$16 00
" No. 1	14 00
" No. 2	12 00
" No. 3	10 00
Brown Peerless Facing	20 00
" No. 1	18 00
Buff Peerless	20 00
" No. 1	18 00
" No. 2	15 00
Moulded and Ornamental Brick from $3 to $10 per C	
Roman Red (Size 12 x 4 x 1½ in.)	30 00
" Buff " "	30 00
" Brown " "	35 00
Vitrified Paving Brick No. 1	18 00
" " " No. 2	15 00
Sewer	8 00
Roofing Tile	22 00

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CAR OR CARGO LOTS, F.O.B. TORONTO.

	Per M. Ft.	
1 inch No. 1 Pine cuts and better	$49.00 to	$51.00
1½ to 2 inch No. 1 cuts and better	54.00	56.00
1 inch No. 3, Pine cuts and better	38.00	40.00
1½ to 2 inch No. 3 cuts and better	40.00	42.00
1 inch Pine Dressing and better shorts	24.00	26.00
1 x 4, 6 and 8 Common	20.00	21.00
1 x 10 and 12 Common	21.00	24.00
1 inch mill run sidings	21.00	22.00
1 inch mill run	21.00	22.00
1 x 10 and 12 mill culls	17.00	18.00
1 inch dead cull sidings	12.00	13.00
1½ inch Flooring	27.00	28.00
Hemlock, 1 x 4 to 8 inch	17.00	18.00
2 x 4 to 8 inch, 12 to 16 feet	18.00	22.00
2 x 4 to 10 inch, 18 feet	20.00	19.00
1½ inch No. 1 4 ft. Pine Lath	4.75	5.00
1½ inch No. 2 4 ft. Lath	4.00	4.25
1½ inch No. 1 4 ft. Hemlock Lath		3.50
XXXX Pine Shingles	30.0	3.25
XX Cedar Shingles	2.25	2.30
B.C. Shingles:		
XXX 6 butts to 2 inch		3.25
XXXX 6 to 23-16 inch		3.47
XXXXX 5 to 2 inch		3.80

HARDWOODS—PER M. FEET CAR LOTS.

Ash, white, 1sts and 2nds, 1 to 2 inch	$33.00 to	$35.00
Ash, black, 1sts and 2nds, 1 to 1½ inch	28.00	30.00
Birch, M. R. 1 inch	22.00	24.00
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Basswood, Common and better, 1 to 1¼ inch	23.00	24.00
Basswood, 1½ to 2 inch	24.00	26.00
Elm, soft, mill run, 1 to 1½ in.	23.00	24.00
Elm, rock, mill run, 1 to 1¼ in.	23.00	25.00
Maple, common and better, 1 to 1½ inch	22.00	23.00
Oak red plain, 1sts and 2nds, 2 to 4 inch	44.00	46.00
Oak, white, 1sts and 2nds, 1 to 1½ inch	42.00	44.00
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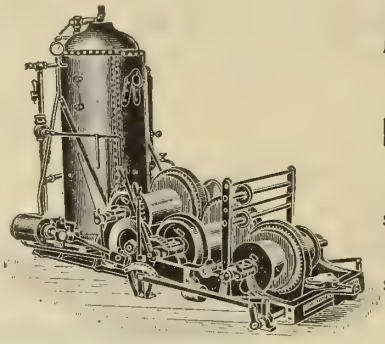

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Manufacturers and Jobbers of
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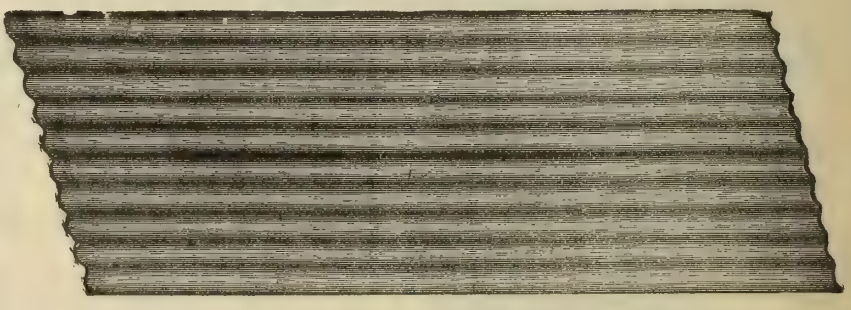

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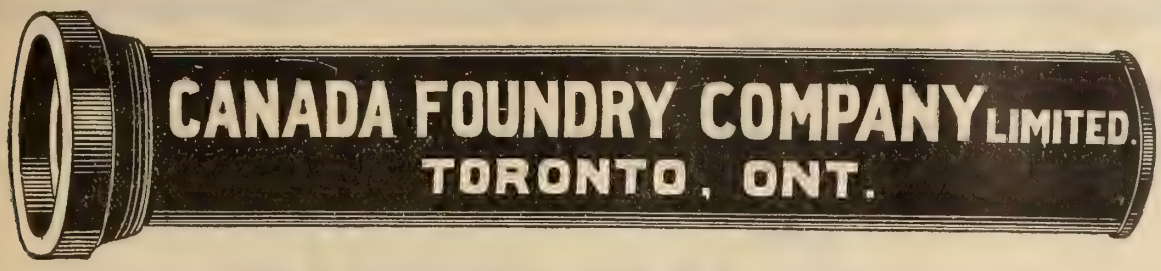

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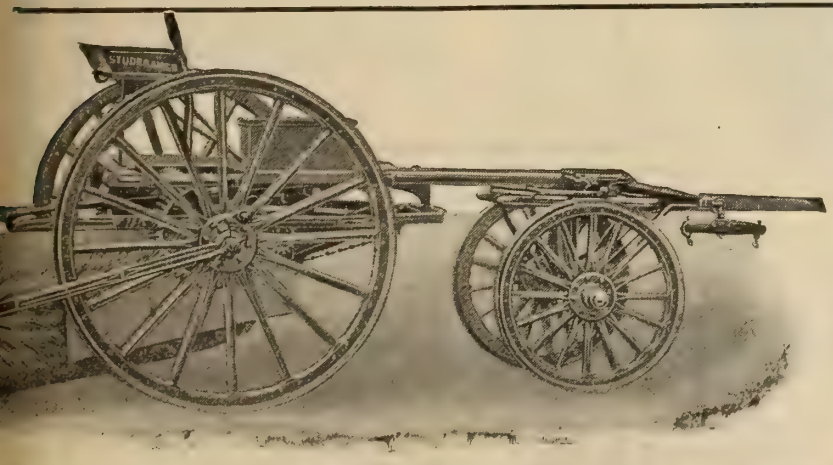

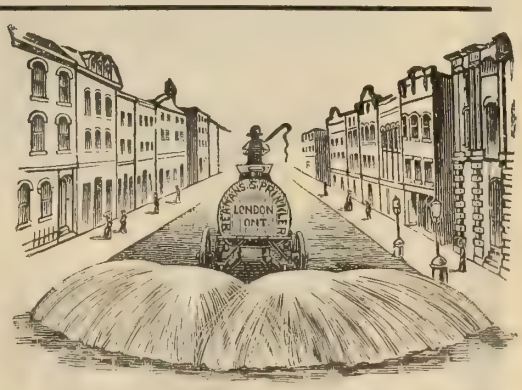

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All the disadvantages of other mixers are overcome by the

1906 Model Ransome Mixer

This machine can be charged lower and at the same time discharged higher than any other batch mixer. The discharge arrangement is perfect. By simply reversing the chute, the whole batch or portion of same can be discharged.

Easy to operate. Efficient. Simple in Construction.

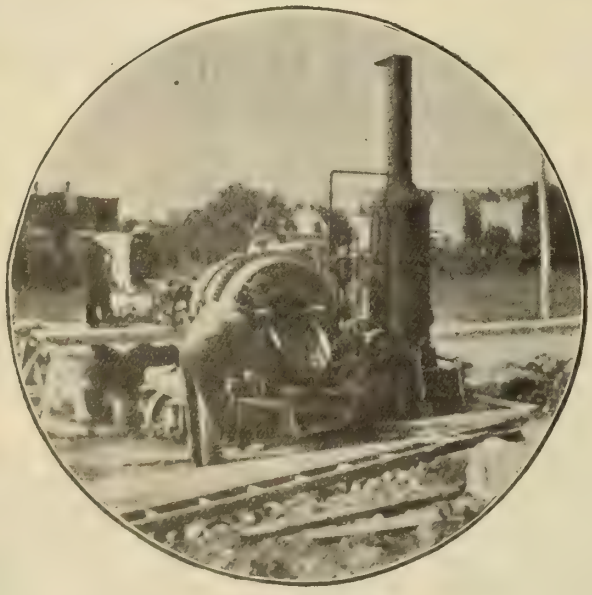
No other class of machinery is subjected to such hard usage and abuse as contractors' equipment. No concrete mixer is fitted to meet these demands as is the

Ransome

Fewest number of wearing parts. They mix perfectly.

Mixers supplied with or without Power. On Skids or Trucks

All Capacities. Immediate Shipment.



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CANADIAN

CONTRACT RECORD

A Weekly Journal of Engineering, Public Works, Tenders, Advance Information and Municipal Progress

This Paper Reaches Every Week the Town and City Clerks, Town and City Engineers, County Clerks and County Engineers, Leading Civil Engineers and Contractors throughout Canada, and Purchasers of Municipal Debentures.

VOL. 17. TORONTO, MONTREAL — NOVEMBER 7, 1906 — WINNIPEG, VANCOUVER No. 35

THE CANADIAN CONTRACT RECORD
PUBLISHED EVERY WEDNESDAY
As an intermediate Edition of the Canadian Architect and Builder.

THE C. H. MORTIMER PUBLISHING COMPANY
of Toronto, Limited,

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City of Prince Albert, Sask.

ENGINEER WANTED

Applications for the position of City Engineer for the City of Prince Albert, Sask., will be received by the undersigned up to FRIDAY, NOVEMBER THE 30TH, 1906. Applicants are requested to furnish references, state qualifications and salary expected.
C. O. DAVIDSON,
Secretary-Treasurer.

Town of Selkirk
MANITOBA

Separate or bulk tenders will be received by the undersigned up till noon of the 12TH OF NOVEMBER NEXT, for the following works:
1. The supply of Vitrified Sewer Pipe f.o.b. Selkirk in carload lots, of sizes running from 9 inches to 24 inches in diameter. Tenders to state prices of Y junctions for various sized pipes and slants for connections to concrete sewers.
2. The excavation and refilling of sewer trenches, providing material, constructing concrete sewers, manholes and catch basins, the town supplying the ironwork and tile slants, the delivery and laying of vitrified sewer pipe.
Plans, profiles and specifications can be seen at the office C. A. Millican, C. E., 433 Main Street, Winnipeg, and at this office on and after 1st November.
A marked cheque for 5 per cent. of the amount to accompany each tender. The lowest or any tender not necessarily accepted.
By order,
(Signed) THOS. PARTINGTON,
Secretary-Treasurer.
Town Hall, Selkirk, October, 1906.

$40 MONTHLY — LARGE YARD AND Office; suitable for contractor; next door west of Wilson Publishing Company's premises. S. FRANK WILSON,
73 Adelaide Street West.
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and excellent opportunity offered young Engineer and Surveyor to join another with wide experience and large connections in best part of Ontario province. Moderate capital needed. Address, 'Radius,' CONTRACT RECORD, Toronto.

TOWN OF PRESTON WATERWORKS

Tenders will be received by the undersigned up to 6 p. m. NOVEMBER 15TH, for the construction of a

STEEL WATER TOWER

Plans and specifications may be obtained from the Engineers, Davis & Johnston, Berlin and Galt. The lowest or any tender not necessarily accepted.
C. R. HANNING,
Town Clerk.

TO CONTRACTORS

Separate or bulk tenders addressed to the undersigned (and marked "Tenders") will be received up to 12 o'clock noon 12TH NOVEMBER, 1906, for the several trades work required in the erection and completion of a Collegiate Institute Building in the town of Picton, Ontario. Plans and specifications may be seen at the office of William Newlands, Esq., architect, Kingston, and at the office of the Secretary of High School Board, Picton. Lowest or any tender not necessarily accepted.
T. BOG,
Picton, October 17, 1906. Secretary.

City of Prince Albert, Sask.

DEBENTURES FOR SALE

Sealed bids will be received by the undersigned up to FRIDAY, NOVEMBER 30TH, 1906, for the purchase of $62.000 City of Prince Albert 4½ per cent. Debentures. These debentures are repayable in thirty equal consecutive annual instalments of Principal and Interest and are issued in denominations of $1000, with coupons attached.
Tenders must include accrued interest from date of issue (July 14th, 1906) to date of delivery to purchaser.
C. O. DAVIDSON,
Secretary-Treasurer.

Refuse disposal by incineration is to be used at Paris, France, and three large destructors are being installed in different parts of the city, each of a normal capacity of 100 tons of refuse per 24 hr. Each station will be fitted with three regenerative Meldrum furnaces, and large Babcock & Wilcox boilers for steam generation.

CONTRACTS OPEN.

MACLEOD, ALTA. — The Town Council have decided to install an electric light service.

MONCTON, ONT. — The Presbyterian congregation intend erecting a new church.

PARRSBORO, N. S. — The Town Council are discussing the extension of their waterworks system.

MOOSE JAW, SASK.—Neil McMillan has purchased a site on River street for a large business block.

DALMENY, SASK.—Plans are being prepared for a large hotel building which will soon be erected.

QUEBEC, QUE.—J. Cherier will erect a building, corner Berthelot and Artillery streets, costs $5,000.

PORT HOPE, ONT. — G. Garbutt has purchased a site, corner Ward and Princess streets for a residence.

STETLER, ALTA.—A site has been selected for a new Roman Catholic church which will be built at once.

CRESTON, B.C.—T. M. Edmonson is receiving tenders for erection of a church for the Methodist congregation.

SYDNEY MINES, N. S.—The Nova Scotia Steel & Coal Company are planning for extensive additions to their plant.

VIRDEN, MAN.— Virden Farmers Elevator Co., will receive tenders up to November 12th for rebuilding the elevator.

RIDGETOWN, ONT. — The Business Men's Association are discussing plans for the new proposed waterworks system.

LONDON, ONT.—Bethune & Fuchs, architects, Buffalo, have stated that a seven story hotel is to be built here, cos $130,000.

LACOMBE, ALTA. — C. West is taking tenders for excavation of the new three story hotel, corner Railway & Dolmage streets.

OTTAWA, ONT.—Tenders will soon be called for the erection of the additions and alterations to the Parliament buildings, cost $250,000.

BELLEVILLE, ONT.—David Price, chairman Harbor Committee, is receiving tenders for the purchase of $12,000 5 per cent. debentures.

PORTAGE LA PRAIRIE, MAN.—The Midland Railway intend erecting a temporary station this fall.—The Bank of Montreal have purchased a site for a new building.

SASKATOON, SASK. — H. B. Proudfoot, C. E., has a scheme for sup-

plying water power from the Saskatchewan river, cost $250,000.

SYDNEY, N.S.—C. Wetmore and F. A. Crowell are considering the establishment of a large rolling mill for the manufacture of bar steel, pit rails, etc.

CALGARY, ALTA. — The R. C. Separate School board are taking steps to establish a new separate school in the Lacombe Separate School District.

PARIS, ONT.—Thos. McCosh, town clerk, will receive tenders up to November 12th for purchase of $4,500 4½ per cent local improvement debentures.

PINCHER CREEK, ALTA.—Lawson & O'Gara, architects, Calgary, have taken tenders for the erection of a stone bank building here for the Union Bank of Canada.

HEADINGLY, MAN. — A petition will be presented to the Minister of Public Works asking for aid towards building a traffic bridge over the Assiniboine river here.

CHATHAM, ONT. — The Water Commissioners and Property Committee have instructed City Engineer Jones to prepare plans and estimates for a new water works station.

HALIFAX, N.S.—The City Council have granted a permit to the Nova Scotia Fertilizers Co., to erect works here.—F. W. Bowes is considering the enlarging of the Bitcham-Bloomingdale Hotel.

FERNIE, B. C.—The Fort Steele Brewing Co. will receive tenders up to December 18th for erection of a fireproof brewery with capacity of 30,000 barrels per year. Plans at office of company.

GODERICH, ONT.—By-laws will be voted on November 10th to loan $50,000 to the Goderich Wheel Rigs Company and to furnish electric power and tax exemption to the Jackson Mfg. Co., to locate here.

BRANTFORD, ONT.—Building permits have been issued as follows: Massey Harris Company, brick extension to shops, cost $15,000; Brantford Cordage Company, brick addition to machine shop, cost $1,200.

HAMILTON, ONT.—The Bank of British North America are preparing for the erection of a building, corner Barton and Westinghouse streets.—New tenders will be called for the construction of the theatre at the terminal station.

SUMMERSIDE, P. E. I. — Subscriptions are being received for rebuilding the Christian church, destroyed in the recent fire.—It has been decided to establish a system of water works, also to restore electric light plant at an early date.

NIAGARA FALLS, ONT. — The Auto Car Equipment Co., of Buffalo, are considering the erection of a factory here. —It is the intention of the Town Council to install a plant for the generation of electricity for lighting and waterworks pumping.

PRINCE ALBERT, SASK.—A by-law has been passed granting $25,000 to the C.N.R. to establish divisional headquarters here.—C. O. Davidson will receive tenders up to November 30th for purchase of $62,000 4½ per cent. city debentures.

TEMPERANCE VALE, N. B.—C. H. La Billois, Department Public Works, Fredericton, will receive tenders up to November 19th for building McElwain bridge, York county. Plans at the Department, and at Geo. Bartlett's store, this place.

EAST TORONTO, ONT.—W. H. Clay, town clerk, will receive tenders up to November 12th for supplying and laying water mains on Queen street, from Beech avenue, eastward 300 feet; and on Lyonde cresent, connecting with main on Balsam avenue and extending to Hughes avenue.

ST. GEORGE, N. B. — C. H. La Billois, Department Public Works, Fredericton, will receive tenders up to November 19th for building Young's bridge over Magaguadavic river, Charlotte county. Plans at the Department and at H. V. Dewer's store, this town.

BRANDON, MAN.—It is understood that the site, corner Rosser avenue and Eleventh street has been purchased by the Union Bank for a new building.—S. & H. Borbridge will receive tenders up to November 15 h for heating system of their block on Eleventh street.

SACKVILLE, N. B.—D. Pottinger, general manager I. C. R., will receive tenders up to November 9th for construction of a standard 50,000 gallon water tank, excavation of trenches and laying water pipes and fittings. Plans at the Chief Engineer's office, Moncton, N. B., and with Station Master here.

VANCOUVER, B.C.—The Vancouver Engineering Works have taken tenders for erection of a foundry building on Sixth avenue.— Building permits have been issued as follows: A Burmeister, dwelling, Third avenue, $1,000; G. H. Crane, dwelling, First avenue, $1,900; Mr. Dempster, dwelling, Boundary avenue, $1,700; J. I. Kyle, dwelling, Comox street, $3,650; T. H. Best, dwelling, Tenth avenue, $1,500.

STRATFORD ONT.—Building permits have been issued as follows: D. McGregor, Shakespeare street, four frame residences; J. J. O'Brien, Downie-street, brick store; Michael O'Brien, Ontario street, brick store; A Knechtel, Dufferin street, two frame residences; Henry Yost, Brunswick-street addition to shop; D. Kruspe, Dufferin-streets, two frame residences; Fred. Hansen, Railway-ave., brick residence; A. Waldie, Erie-street, frame stable.

MONTREAL, QUE.—L. O. David, City Clerk, will receive tenders up to November 7th for erection of a weighhouse on Atwater avenue. Plans with M. L. R. Montbriant, architect.— The citizens of Westmount will petition the Government to build a new post office.— The arrangements have been completed for enlarging the cement mill of Thomas Morgan at Longue Pointe.—Plans have been prepared by J. J. Browne & Son, architects, for a ten-story building, corner St. Catherine and Drummond streets for Willis & Co., piano dealers.

WINNIPEG, MAN.—The Committee on Works has this week taken tenders for construction of granolithic walks on Olivia, Maple, Alexander, Sargent and Furby streets; sewer construction in Mountain, Notre Dame, St. John's and Anderson Avenues and Charles street; asphalt pavements on Salter, Monkman, Rorie and Maple streets, Selkirk, Sargent and Sutherland avenues.—The City Engineer and Health Officer have recommended sewers to be constructed in Alfred avenue.—The City Council gives notice of its intention to construct granolithic walks on Hargrave and Fountain streets.—A site has been chosen in Block F, St. Boniface, for the new shops of the C. N. R.

EDMONTON, ALTA.—F. Gelinas, Department of Public Works, Ottawa, will receive tenders up to November 28th for construction of a public building here. Plans at the Department, with R. J. Manson, Clerk of Works, this city, and J. Greenfield, Superintendent of Public Works, Winnipeg. — Building permits have been issued as follows: Dr. Sproule, dwelling, Sixth street, $3,000; R. W. R. Armstrong, printing office, $5,000; Y.M.C.A. building, $50,000; W.A. Fife, dwelling, Twelfth street, $2,700; D. A. McClelland, dwelling, Sutherland street, $2,100; Robt. J. Anderson, dwelling, Sutherland street, $2,100; Campbell Furniture Company, frame warehouse, Second street, $3,700; E. Flexman, dwelling, Thirteenth street, $1,800; M. Stillman, dwelling, Edmiston street, $1,200; E. Bayliss, dwelling, Ross street, $2,400; T. H. Mason, store, Namayo street, $1,200; A.C. Carrathurs, store, First street, $1,500; A. R. Chisholm, frame dwelling, corner Jasper and Fourth streets, $3,500.

TORONTO, ONT.—A. G. Strathy & Co., real estate dealers, have sold the property, 136-138 Adelaide street west, to Littl john & Vaughan, who will erect a building there for their use. They have also sold the property, 84 and 86 Duke street, to D. Kennedy for a factory building; a lot on Shaw street to E. W. Watkins for a residence; a lot, corner Bloor and Brunswick avenue for a residence, and block of land on Yonge street, near Davisville, on which eight residences will be erected. The same dealers have sold the following dwellings, which will be remodelled and improved: Nos. 234 to 238 Sackville street, 60 to 64 Nelson street, 20 and 22 Duncan street, 123 Manning avenue, 41 to 47 Peter street.—Tenders will be taken at 107 Lippincott street for lathing, plastering, plumbing and carpenter work of four houses at Toronto Junction.—The Board of Control have decided to readvertise for tenders for roofing St. Lawrence market.—The plans for the new Royal Bank building King street east are being prepared by Carrere & Hastings and E. G. Bird, architects and it is expected that work of building will soon commence.—Tenders are wanted at 388 Spadina avenue for building three brick houses.—A by-law will be submitted to the ratepayers, January 1st, providing for the construction of Yonge street bridge, and in the meantime tenders will be called.—The Board of Control have decided to lease a site at Ashbridge's Bay to the Sherwin-Cooper Company for a factory for gasoline launches.—C. W. Morrison, New York, has purchased the Banks farm on Yonge street, near Davisville, on which he intends building a number of houses to cost from $2,500 to $5,000.—A lot has been sold on St. George street, south of Bloor, on which a family residence will be erected.—City Engineer has recommended the construction of the following: Vitrified block pavement on Jarvis street, from Front to Queen, cost $22,168. Cement concrete sidewalks on Ossington avenue, from Dundas to College, $2,166; Lippincott, from College to Bloor, $3,152; Esther, from Queen to Grange, $1,201; Belmont, from Yonge to Davenport, $1,210; Macpherson, from Avenue road to 685 feet west of Yonge, $2,034; King, from John to 66 feet west of Widmer, $1,481; King, from Spadina to 66 feet west of Widmer, $1,219; Dupont, from Bathurst to Christie, $2,206; Clinton, from Bloor to Barton, $1,797; Queen, from Pape to Leslie, $2,643; Hampton, from Danforth to Hogarth, $1,871; Huron, from Grange to College, $2,576; Chestnut, from Agnes to Queen, $1,762, and many others.— The City Engineer has been instructed to report on a high level bridge extending eastward from Bloor street.—The officers of the Home for Incurable Children intend soon to build an addition to their present building, at 138 Avenue road, cost $15,000. — Building permits have been issued as follows: J. W. Fowler, three 2-story and attic brick dwellings, Bathurst street, near Barton avenue, cost $7,500; M. Healy, 2-story and attic brick dwelling, 659 Huron street, cost $6,000; W. Tucker, 2-story brick dwelling, Lynd avenue, cost $2,500; Henry G. Kerby, 2-story and attic brick and stone dwelling, Roxboro avenue, near Clumy, cost $6,500; R. Johnson, 2½-story brick dwelling, Pearson avenue,

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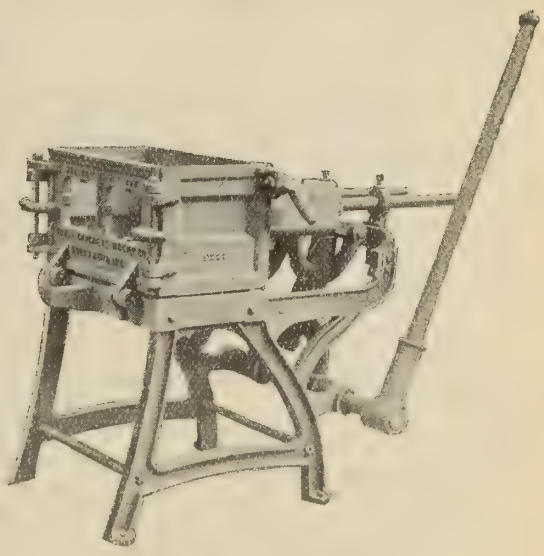

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MONTREAL

cost $3,200; G. A. Fleming, 2-story brick dwelling, Boustead avenue, cost $2,500; Whaley & Carter, pair 2½-story brick dwellings, Simpson avenue, cost $6,200; C. W. Chadwick, pair 2-story brick dwellings, 635-637 Shaw street, cost $5,000; J. & W. H. Avison, pair 2-story and attic brick dwellings 164-6 Margueretta street, cost $5,000; Eureka Refrigerator Company, 1-story dry house and dry kiln, 52 Noble street, cost $1,700; J. T. V. May, six 2-story and attic brick veneer dwellings, Brock avenue, near College street, cost $10,000, R. J. Robson, 2-story and attic brick dwelling, Gladstone avenue, near College street, cost $1,800; J. M. Smith, three 2½-story brick dwellings, 1062 Bathurst street, cost $7,400; John M. Scott, 2½-story brick dwelling, 223 Grace street, cost $3,400; A. T. Graham, pair brick stores 805-8 College street, cost $4,500; W. J. Sanderson, 2-story brick dwelling, Shaw street, near Bloor, cost $2,500; Mr. Morley, 2 story and attic brick dwelling, Pearson avenue, cost $2,500; J. Coulter Co., 3-story brick factory, Lombard street, near church, cost $8,000; F. S. Duff, pair 2-story and attic brick dwellings, 46-8 Beatrice street, cost $5,000.

CONTRACTS AWARDED.

ARNPRIOR, ONT.—$35,000 4½ per cent debentures: W. C. Brent, Toronto, purchaser.

WELLAND, ONT. — Plumbing in Goodwin & Ross' store: Griffiths & Grass, contractors.

PORT ARTHUR, ONT. — $274,000 town debentures: Dominion Securities Corporation, purchases for $276,823;

NEW WESTMINSTER, B. C. — Erection of Mosque at Millside for Hindoo colony: Parker & White, contractors.

SYDNEY, N. S.—Erection of St. James church: Chappell Bros., contractors, cost $14,500. B. Whitten, architect.

ST. BONIFACE, MAN.—Erection of new Public school for the Norwood division: J. H. Tremblay, contractor, cost $55,880.

FREDERICTON, N. B. — $60,000 water improvement and sewerage debentures have been sold at par through the City's Brokers.

DUNNVILLE, ONT. — Erection of Knox Presbyterian church: Edgar Neville, London, contractor. F. Sheppard, architect.

SASKATOON, SASK. — Erection of new building for the Canadian Bank of Commerce: Canadian White Co., Montreal, contractors.

GLEN PAYNE, ONT.—Installations of Kelsey system of warming and ventilating in public school: James Smart Mfg. Co., Brockville, contractors.

VICTORIA, B.C.—Erection of business block, corner Wharf and Fort streets, for Pither & Leiser: Gribble, Skene & Co., contractors, cost about $50,000.

UXBRIDGE, ONT.—Installation of Kelsey system of warming and ventilating in the Methodist church: James Smart Mfg. Co., Brockville, contractors.

HAMILTON, ONT.—Construction of terminal station for the Cataract Power Co.: Canadian White Company, Montreal, contractors, cost about $250,000.

SARNIA, ONT.—Erection of residence on Christina street for W. C. Dillon: Masonry, Corrick & Sons; carpentry, James McIlhagga; painting, Simpson & Carter.

LETHBRIDGE, ALTA.—Erection of three story brick factory for Lethbridge Woollen Mills Co.: Rex Virtue, contractor, cost about $25,000. J. A. Macdonald, architect.

WINNIPEG, MAN.—The tender of Kelly Bros., Kenora, Ont., for construction of cement piers for the Redwood bridge has been recommended for acceptance.—The contract for supply of 1,000,000 ties, 6,000,000 feet of logs and 300,000 feet of piling for the C. N. R. has been warded to James Cowan.

BRAMPTON, ONT. — Erection of Public Library building: Masonry, carpenter work and plastering: Mason & Hill; painting and glazing, James Harmsworth; plumbing, Higgins & Large roofing and tinsmithing, Forbes Roofing Company, Toronto; electric wiring, Bennet & Wright, Toronto.

FIRES.

Factory of Silker & Co., Amherst, N. S., damage $3,000,—Saw and grist mill, etc., Treffle Roberts, Brigham, Que., totally destroyed, loss $9,000.—Residence of C.A. Case, Duke street, St. Catharines, badly damaged.—Rossner & Brownstone's stable and contents, loss heavy.—Boiler room of the Rossin House, Toronto, demage $2,500.—Old Folks Home, Bowmanville, Ont., completely destroyed.—Evaporating factory of F. Blasdall at Delaware, Ont., loss $5,000.—Farm buildings of D. McKinnon, Oak Lake, Man., loss $4,000.—T.H.& B. car shops, Hamilton, Ont., damage $10,000.

NOTES.

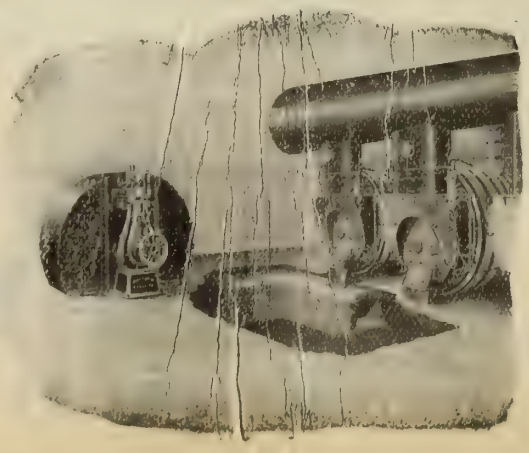
Walker & Moore, painters, etc., Lindsay, Ont., have assigned to I. E. Weldon.

Hydraulic air compression by the system of entraining free air in flowing water and then conducting the water down a shaft until it is under sufficient head to give the desired pressure, at which point the air is intercepted and piped to the surface, is to be tried at South Thomaston, Me. The principle employed is substantially that used at the well-known stations at Magog, P.Q., and Norwich, Conn., but modified so that the head will be furnished by tidal action.

Deep trench excavation in wet sand has proved more economical than tunneling on sewer work at Sydney, N.S.W. The test was made where the sewer was 22 ft. below the surface. On the first section the excavated material was thrown from stage to stage, being handled four times. To save this handling an overhead cable was supported by masts over the line of the trench and the sand was lifted by a hoisting engine and travelling block. This device reduced the cost of excavation from $1.86 per cubic yard, the figure when casting was employed, to $1.62; the sand carried more water where the cable was used, which made the reduction in cost an incomplete measure of the actual gain. The cable was 350 feet long and the masts were 34 feet high. This method of excavation was more economical than tunneling, and the expense of laying concrete and brick in the trench was nearly 50 per cent. less than in tunnel.

Waste gases from rotary cement kilns are been utilized to raise steam in boilers in a cement plant in southern Germany. The boilers are placed in settings built at the ends of the kilns, eight boilers having been placed in this manner, seven of which are in constant service. The boilers supply steam at 110 lb. pressure to a 450-h.-p. engine which drives the twelve rotary kilns in the plant and a coal grinding plant. The large amount of ash and fine raw materials which are driven off from the kilns is said to occasion the one great difficulty in the utilization of the waste gases, in that the ash and fine material threaten to clog the tubes of the boilers, but this could doubtless be largely overcome if water-tube boilers were used.

In Eastern Canada the extent of the trade in wooden pipe in British Columbia is hardly realized, and the enormous business being done in this direction within the short time from the organization gives some idea of the scope for future business. The Pacific Pipe Co., of Vancouver, have just completed the manufacture of 10,000 feet of 18-inch pipe for Fort William, Ont., as well as ten miles of 8-inch pipe for the same municipality. The company are now engaged on an order of 10½ miles of pipe to stand a pressure of from 300 to 500 feet head for the Canadian Pacific Railway in Alberta. This is the biggest pipe contract ever given in Canada. They are also working on an order of 6,500,000 of 24-inch pipe for the White Valley Irrigation & Power Co., at Vernon, B.C., as well as an order of about two miles of 6-inch pipe for Port Arthur. Besides these the firm have just completed installing waterworks systems for Cardston and Claresholm.



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Constant Steam Pressure
Independent of Weather

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NOTES.

Joseph Forget, roofer, Montreal, has assigned for the benefit of his creditors.

The firm of F. A. Grothe & Co., contractors, etc., Montreal, has been dissolved.

The Oliver Motor Car Company, recently formed to manufacture the Oliver trackless car, have located in Sarnia, Ont.

Alphonse Lafond and Thomas Bouchard, general contractors, Montreal, have registered under the firm name of Lafond & Bouchard.

The Meisel Manufacturing Company and the Port Huron Engine & Thresher Company are about to erect factories in Port Arthur, Ont.

W. A. Telfer and W. J. Baker, carpenters, Moose Jaw, Sask., have given notice that the partnership existing between them has been dissolved.

The Canadian Pipe Co., of Vancouver, have supplied half a million feet of wooden pipe to different points in Canada. The City of Vancouver is installing 3 miles of 36-inch continuous stave pipe built by this company. The pressure from a head of 195 feet is 80 lbs. per square inch. This is for the intake of the city water supply. It was decided to go three miles further up the mountains to get a better pressure.

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LIMITED.
TORONTO, CANADA.
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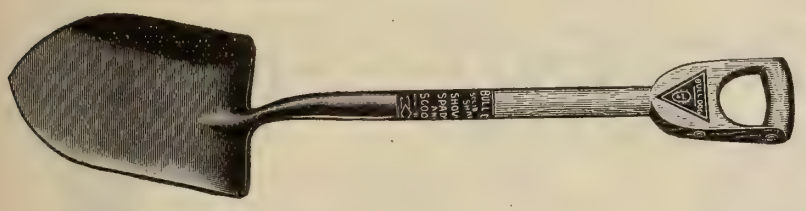

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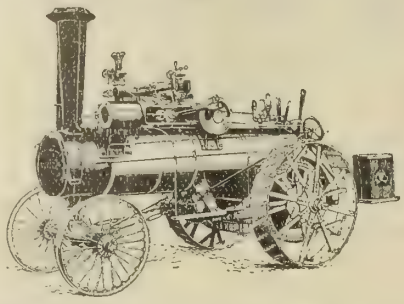
Niagara Falls, - Can.

PUBLICATIONS.

Messrs. W. H. C. Mussen & Company, railway contractors' and municipal supplies, Montreal, are always to the front. Their 1907 calendar has already reached us. It is quite attractive and contains a splendid map of the Dominion of Canada.

It is stated on good authority that the price of brick in Hamilton will soon be raised from $8.50 to $10 per thousand. In Toronto prices range from $10 to $18 according to quality.

Painting roads with tar to prevent dust has been tried in several places by Mr. Frank G. Howell, county engineer of Surrey, England. The surface is thoroughly swept when perfectly dry until the road metal is exposed. Hot tar is then poured on the road and brushed well into it, after which the surface is sprinkled with sand. The initial expense is said to be small and a considerable amount of dust is prevented. On wind-swept open roads the surface is preserved by the tar, and the cost of the tarring is practically saved. On roads made of crushed granite, near towns, the cost is not saved by the decreased wear, but the dust is lessened. The tarring can only be properly done during perfectly fine weather, and, unfortunately, however carefully the work is executed, the surface is liable to churn up during the heavy rains of the early winter.



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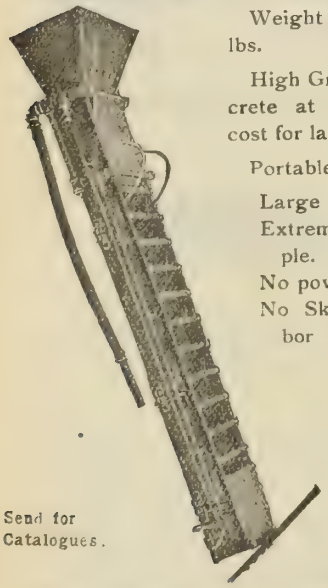

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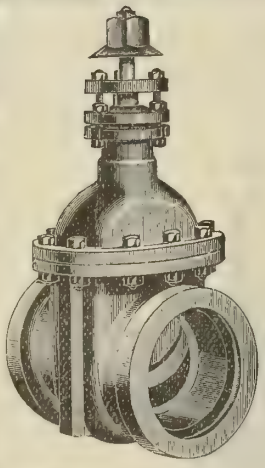

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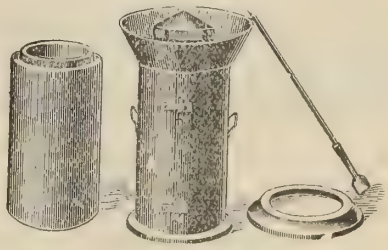

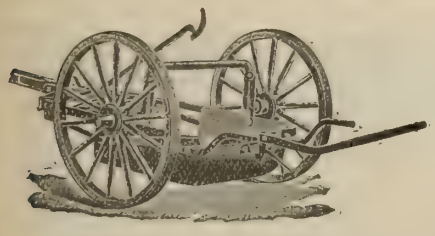

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THE SETTING AND CARE OF FIRE HYDRANTS.

With the approach of winter, which the weather prophets say will be a severe one, the superintendents of waterworks are necessarily engaged in putting fire hydrants in good condition for resisting freezing. It is accordingly timely to call attention to the recommendations on this subject made by the National Fire Protection Association. They read as follows:

In setting hydrants where the soil is not porous enough to ensure ready drainage, place around the base gravel, small fragments of stone or broken bricks to provide a stratum which will absorb water issuing from the hydrant drain in the normal operation. This drainage space should be kept low so as not to contribute to the easy penetration of frost around the hydrant. (Note.—Hydrants in cities are sometimes piped to drain to a sewer. The other means herein recommended are more applicable and simpler.)

Branch pipes to hydrants are more susceptible to freezing than the main line. Hydrants must therefore be of such length as to afford safe cover. (Note — There is a temptation for men who lay pipe to raise the branch lines when they will not raise the main lines, because they buy hydrants of a specified length for the job, and many times it is comparatively easy and always advisable to put the main pipe low, but rock or some other obstruction makes it equally convenient to put the hydrant high, the result being that the branch pipe at the hydrant, where, naturally, there will not be any circulation, and where, therefore, freezing is more apt to occur, is the least protected of any point in the system.)

In the fall, just before the ground begins to freeze, try every hydrant by running water through it. After it is shut off, examine carefully to see that it is draining properly and that it is in good condition, noting any necessary repairs immediately. (Note.—Be careful that the hydrant valve does not leak, because even if there is good drainage for a reasonable amount of water, continued leakage is apt to fill up the space and cause water to back up into the hydrant. The hissing of a small leak can be heard by placing the ear firmly against the iron casting.)

After two weeks examine the hydrants again without water running through. Small leaks will then have had a chance to fill up the hydrant and show at the hose outlets. Having thus made sure the condition is good, do not use the hydrants again during the winter except in case of absolute necessity, making visual inspection at least once a month meantime.

Hydrants set where ground water stands higher than the hydrant drain should have the drip openings plugged and be pumped out by hand with a pump having a suction pipe suited to be inserted to the bottom of the hydrant barrel, as should any hydrant concerning which the drainage is in doubt.

In using hydrants having independent valves on the hose outlets, the hose gates should be shut last to insure drainage and to prevent leaving the inlet gate open and water in the hydrant. (Note.—A small hole has been drilled in the bottom of the hose valve when this is applied outside the hydrant, through which air may enter and water will issue. The procedure of rule will apply to all types of hydrant in use.)

The practice of putting foreign materials into a hydrant to prevent freezing, notably mixtures containing salt, is not recommended. The presence of salt is apt to induce galvanic action between the dissimilar metals of the hydrant, resulting in injury. Of course, such action takes place right at the valve, the most important part of the device.

To thaw we recommend the application of dry steam. Municipalities usually have a portable boiler which can be obtained. Repeated internal applications of hot water may be used. Only in extreme cases where other means are not available should the heat of a fire be applied to a hydrant, as valves are liable to be injured and it takes time and trouble to repair lead joints.

OCTOBER BUILDING T TALS.

The number of building permits issued in Toronto during the past month was 570, vlaued at $1,536,575, and making a total for the ten months of this year of $11,102,903. When compared with last year these figures show a large increase. The building permits for October, 1905, numbered 271 and were valued at $1,009,005, while the totals to the end of October were $8,954,789.

In Winnipeg the October building values totalled about $1,080,000, making $11,675,000 for the past ten months of this year. In October, 1905, the building values were only $445,800.

NEW CRUSHING PLANTS.

Among recent sales of crushing plants by Allis-Chalmers-Bullock, Limited, of Montreal, were a No. 6 Gates "K" breaker complete with a 40 h.p. engine to Wallace & Sturtevant, Bancroft, Ont; a "D" breaker, set of "B" rolls, "Gates" tube mill, "Reynolds" Reliance Corliss engine, boiler, elevators, etc., to the Commercial Cement Company, of Rose Isle, Man.; and a "Dodge" crusher with "Gates" elevators, etc., to the Western Canada Cement & Coal Company, Limited, Exshaw, Alta.

Cowan & Company, of Galt, Ont., are making extensive additions and improvements to their shops.

NEW COMPANIES.

J. A. Robertson Company, Limited, Toronto, incorporated, capital $500,000, to manufacture and deal in bricks, tiles, lumber, etc. Promoters, J. S. Lovell, W. Bain, E. W. McNeill and W. F. Ralph.

Canadian Refining Company, Limited, Ottawa, incorporated, capital $2,000,000. Promoters, H. Roy, Ottawa; F. W. Rolt, Rossland, B.C.; E. Hoffman, New York, and others.

British American Oil Company, Limited, Toronto, incorporated, capital $200,000. Directors, H. Babel, W. A. Manion, A. L. Ellsworth.

Canada and United States Oil & Gas Company, Limited, Chatham, Ont., incorporated, capital $30,000. Directors, E. I. Barnard and J. W. Shay, Pittsburgh, Pa.; P. W. Roth and F. B. Barnard, Buffalo; and others.

Erie Natural Gas Company, Limited, Dunnville, Ont., incorporated, capital $40,000. Directors, W. W. Krick, F. M. Waines, A. Hoover, A. A. Root, and others.

Silver Lion Mining & Development Company, Limited, Cobalt, Ont., incorporated, capital $500,000. Directors, F. Watt, Toronto; J. Black, Cobalt; A. G. F. Ross, Montreal; and others.

Harley Kay Knitting Machine Company, Limited, Georgetown, Ont., incorporated, capital $40,000. Directors, F. A. Harley, A. F. Hatch and J. L. Counsell, all of Hamilton.

Watts Mines, Limited, Toronto, incoporated, capital $1,000,000. Directors, W. R. P. Parker, G. M. Clark, J. M. McEvoy, G. Russell, and E. M. Lindsay.

NEW IDEA IN PAVING BLOCKS.

A new idea in granite paving blocks which has been tried successfully in England, are being manufactured in a wedge shape, and are particularly appropriate for roads over which pass heavy vehicles. This form of granite block has been used for some time in Germany, giving highest satisfaction. These blocks are four inches and wedge shaped, instead of the ordinary six-inch square block, in general use. In placing these new shaped blocks on the roadway, they are set uppermost with the greater end or base uppermost, in the form of a segment of a circle.

When placed in the above manner, the blocks are rammed down to a level and covered over with a dressing of fine sand. The greater the weight that is placed on these blocks forces them closer together, so that they gradually become more compact, thereby giving strength and solidity to the thoroughfare. The cost is said to be only slightly in excess of the ordinary paving block, and the manufacturers of granite blocks for paving purposes will no doubt see in them a profitable source of revenue.

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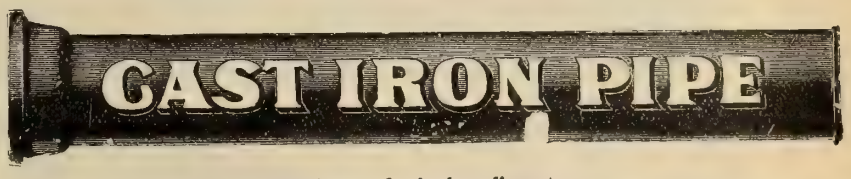

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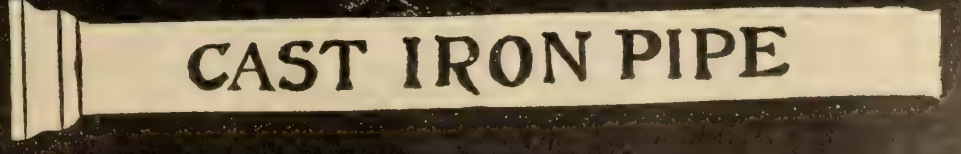

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ABOUT MODERN SEWERAGE SYSTEMS.

The following extract from an article on "The Bacterial Purification of Sewage," in a recent issue of the *Scientific American*, contains information of considerable interest to municipalities.

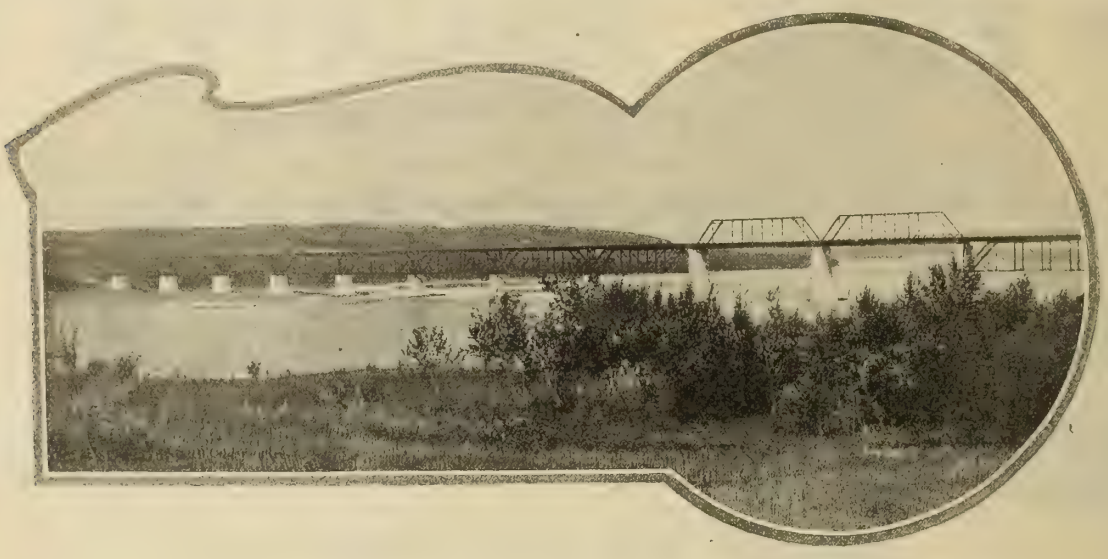
In 1895 Donald Cameron, of Exeter, England, brought the septic tank into prominence. This consists of a large tank, in which sewage is allowed to remain, where it is acted upon by anaerobic bacteria —micro-organisms that live without the presence of air. Sewage contains a considerable portion of solid matter in suspension. By means of anaerobic action part of it becomes liquified and goes into solution, part rises to the top as scum, while part descends to the bottom as sludge. The inlet and outlet of the tank are placed below the surface, so that the sewage may pass quietly through with as little commotion as possible. The scum which rises to the top becomes oxidized after a time, and passes off into the air as harmless gas. A certain amount of decomposition takes place in the sludge at the bottom. When the tanks, are large, sludge accumulates very slowly at the bottom. At a septic tank at Mansfield, Ohio, only a few inches of deposit were drawn off after it had been in use for a year and a half.

The septic tank has proved a most useful factor in sewage purification. It is used extensively as preliminary treatment for contact beds and percolating filters. It cannot, however, be considered by itself as a system of purification; it can be used successfully only as part of one.

There are some small towns in this country, however, where septic tanks alone have been used. The results in these places have invariably been very poor. The septic tank by itself is regarded by sanitarians as little better than an apology for a sewege disposal plant. In some cases, when only a low degree of purification is needed, such as when sewage is put into theocean, septic tanks have proved useful.

Perhaps the most practical method of sewage disposal is the combination of the septic tank and the contact bed. The contact bed system was devised by W. J. Dibdin, who installed the famous bed at the town of Sutton, England. In this system sewage is first passed through a screen, to prevent the floating particles from blocking the interstices of the bed. It is then passed over a coarse-grained bac- three feet deep filled with broken stone, coke, burnt ballast, or other suitable material not more than three inches in diameter. It is supplied with under-drains, so that it can be easily emptied. The sewage is allowed to enter the bed until the level of the filtering material is reach- teria bed. This consists of a tank ed. The inlet is then closed, and the sewage is allowed to remain standing "in contact" for a certain length of time. During this period the aerobic bacteria do their work. They oxidize the organic matter in solution, and in their search for food they decompose a considerable portion of the impurities. Further-

(Continued on Page 14.)



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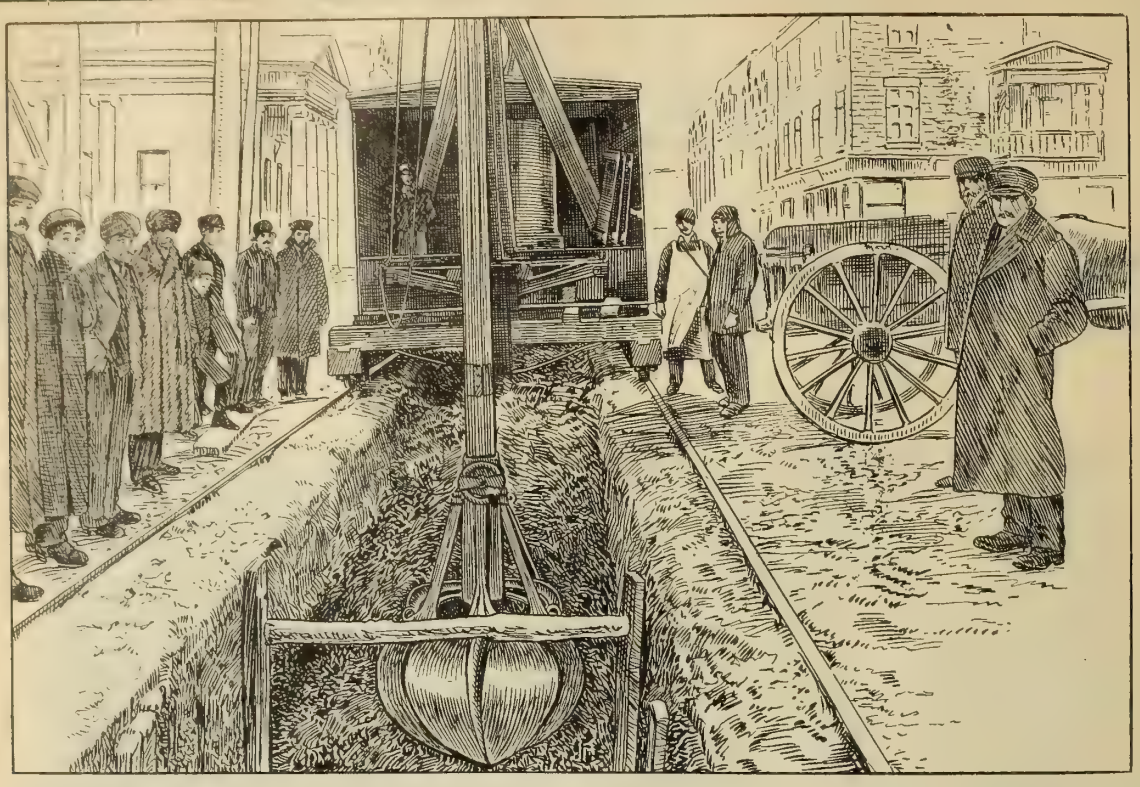

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Page
Ontario Accident Insurance Co. 19

BLUE PRINTS
Electric Blue Print Co. 7

BLOWERS
Buffalo Forge Co. 4

BRIDGES (CONCRETE)
Steel Concrete Co. 15

BRIDGES (STEEL)
Canadian Bridge Co. 19
Canada Foundry Co. 23
Dominion Bridge Co. 15
Jenks & Dresser 16
Phoenix Bridge and Iron Works 15

CEMENT
Alsen Portland Cement Co. 9
Bremner, Alex. 6
Currie & Co., W. & F. P. 20
DeSola, C. I 7
Gray & Bruce Portland Cement Co. 21
Hyde & Co., F. 22
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Lakefield Portland Cement Co. 14
McNally & Co., W. 7
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Morgan, T. M. 15
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Peat & Sons, James 14
Toronto Pressed Steel Co. 7

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Ambursen Hydraulic Construction Co. 7
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Steel Concrete Co. 15

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Pedlar People 22

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Beatty & Sons, M. 22
Dartnell, E. F. 6
Hopkins & Co., F. H. 24
Mussen & Co., W. H. C. 3
Morrison & Co., T. A. 20

DEBENTURES
Nay, Anderson & Co. 22
Stimson & Co., G. A. 21

DRILLING CONTRACTORS
Page
Harvey, J. 20
Peat & Sons, James 14

ENGINEERS AND CONTRACTORS
British Columbia General Contract Co. 23
Canadian White Co. 6

ENGINEERS (CIVIL)
Archibald, George H. 15
Chipman, Willis 17
Connor, Clarke & Monds 17
Davidson, Shirley 21
Davis, Johnston 15
Fielding, John S. 7, 13, 17
Galt, John 7
Jackson, John H. 17
Lea & Coffin 17
Leofred, A. 21
McConnell, Brian D. 13
McDougall & McRae 7
Parke, Roderick J. 17
Scott, Wm. Fry 21
Simpson, T. T. 21

ENGINEERS (MECHANICAL)
Farmer, John T. 21
Galt, John 7

ENGINES
Cameron & Co, Hugh 16
Sawyer & Massey Co. 6

ELECTRICAL APPARATUS AND SUPPLIES
Allis-Chalmers-Bullock 11
Drummond, McCall & Co 14
Northern Electric & Mfg. Co. .....

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Pacific Coast Pipe Co. 20

PIPE (CONCRETE)
Page
Dominion Concrete Co. 6

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McDougall Caledonian Iron Works Co., John 19

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United States Fidelity & Guaranty Co. 21

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more, certain ferments known as enzymes aid in the work of decomposition, while the solid particles adhere to the filtering material. The sewage is then allowed to flow slowly out of the bed, leaving many impurities upon the filter material. It flows into another similar bed, where further similar action takes place. Now that the bed is empty, aerobic action goes on among the particles of sewage left in the interstices of the material. Before the next flush comes, most of the spongy matter in the bed has been converted into gases. When the bed fills again, the gas is driven out of the bed into the air above.

Such is the method in use at Sutton. It is simple and effective, and has been widely used in systems laid out more recently. After the sewage has been treated in a septic tank, it generally need only be treated in one contact bed to secure the necessary purification.

Most septic tank contact bed systems contain several bacteria beds, so that while one bed is filling, another may be in contact, another emptying, and another resting empty. Four is a favorite number of beds for a small town plant, while six are often used.

The contact bed system involves only a small fall, so that it can be applied in almost any district. It has been in successful operation in many towns both in this country and in England. The secret of its success is the regularity of the time of contact and aeration. Experience has shown that unless such regularity is maintained the bacteria will not remain in healthy condition.

At Manchester, England, is the largest septic tank-contact bed system in the world. The beds are opened and closed at regular intervals by hand. In the more recent contact bed systems installed in this country, the invention of automatic airlock apparatus has made it possible to have the beds fill and empty at regular intervals automatically.

A more recently devised system of filtration, and one that is gaining favor in England, is known as intermittent downward filtration, percolating, or trickling filters. These filters are many feet in depth. The sewage is distributed in intermittent doses—often by means of a large revolving sprinkler. They are filled with material similar to that used in contact beds. At the bottom there is an open space for the circulation of air.

In order that percolating filters work successfully, great care must be taken in their construction. It is essential that air should always be present in all parts of the filter, scum must not be allowed to accumulate; there must be a thorough draining at the base, so that the filtrate may come from the filter easily and force air to come in by

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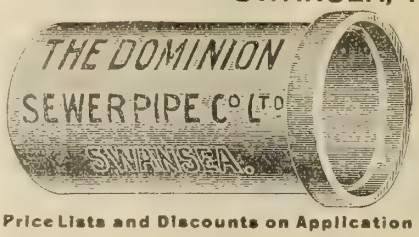

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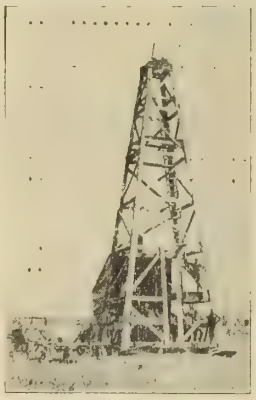

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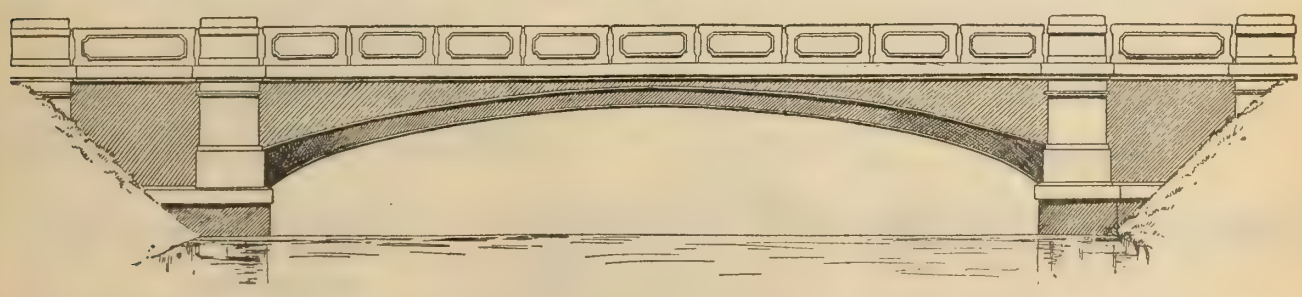

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induction. During the fall of the sewage through the bed, the aerobic bacreria get a splendid opportunity to oxidize organic matter, provided they have a sufficient supply of air. The effectiveness of a percolating filter increases with its depth, so that the filters are made as deep as possible.

They are generally used with septic tanks. This system is in use at Birmingham and Hanley, England, but it has practically never been applied in this country. The objections to its use are first the great fall required and secondly the danger of stoppage through frost, unless artificial heat is used. At an experimental plant at Leeds a purification of over 80 per cent. was secured in three minutes by this method.

The method of intermittent downward filtration is largely used in New England. It is, however, merely an adaptation of the old system of land treatment. It consists of passing sewage over soil intermittently, so that the land after receiving one charge of sewage is allowed to rest for a certain space of time before receiving the next. Underneath are generally placed under drains so that the effluent can easily escape. Although areas averaging as much as from ten to twenty acres per million gallons are necessary for these beds, the results obtained have been satisfactory. It is frequently necessary to pump the sewage to the filters. The best known examples of intermittent downward filtration through sand are those at Brockton and Framingham, Massachusetts. In both cases pumping stations are required. This system has one or two drawbacks besides its expense. Unless great care is taken, the sewage goes

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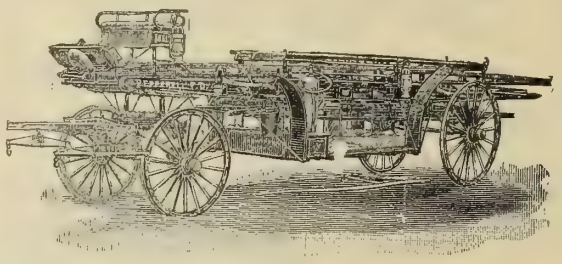
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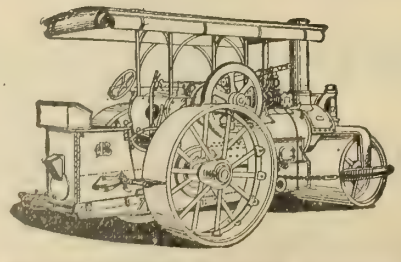
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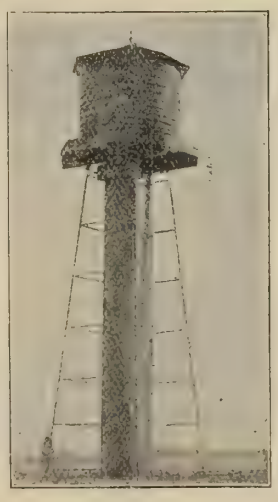

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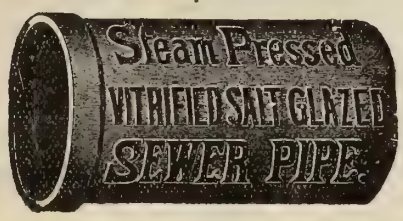

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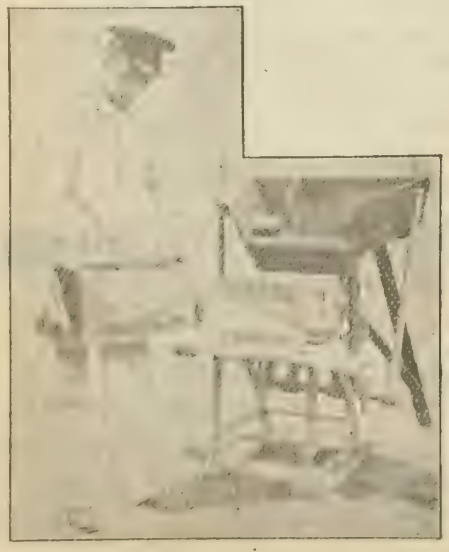

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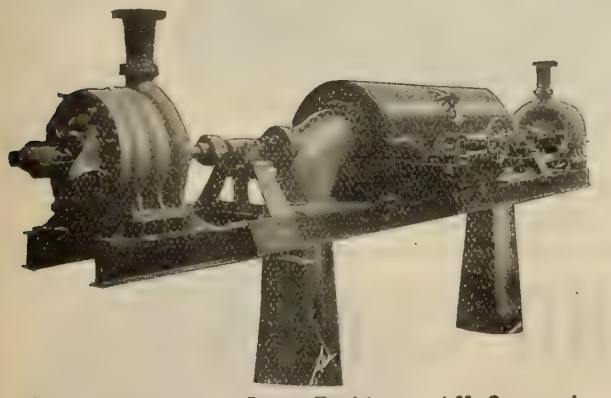

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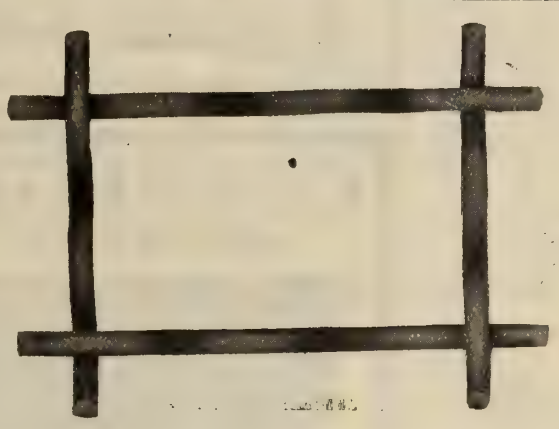

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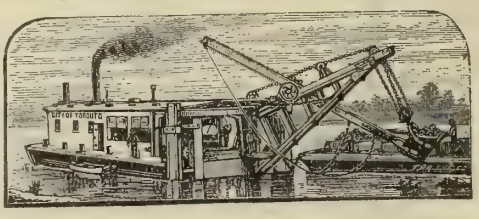

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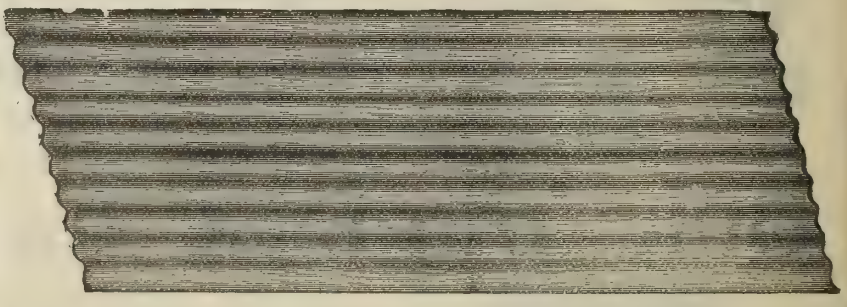

Pedlar's Corrugated Steel Sheets are manufactured on a **38,000 lb. Oh Press**—one corrugation at a time—and are guaranteed straight and true to size **Six Hundred Tons in Stock in Oshawa, Montreal, Toronto, Ottawa and London,** in gauges varying from 28 to 18, both painted and galvanized. Made in 1", 2" or 2¾" corrugation—corrugation lengthwise or across the sheet. Sheets 2 3, 4, 5, 6, 8 or 10 feet long at no extra charge. **Ask for Catalogue No. 14 R** and give specifications for prices.

We are the lagest makers of Sheet Metal under the British Flag.
ESTABLISHED 1861 — CAPITAL INVESTED, $250,000.

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Montreal, Que. 321-3 Craig St. W. — *Ottawa, Ont.* 423 Sussex St. — *Toronto. Ont.* 11 Colborne St. — *London, Ont.* 69 Dundas St. — *Winnipeg, Man.* 76 Lombard St. — *Vancouver, B.C.* 615 Pender St.

Write your nearest office. Head office and Works, OSHAWA, ONT.
"Keeping Everlastingly at it Brings Success."

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CAST IRON PIPE FOR WATER OR GAS

Special Castings,

Tees, Crosses, Flanges Pipe, Valves, Hydrants,

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The **British Columbia General Contract Company,** Limited

Telegraphic Address: "Dredging" Fall Hold Building, VANCOUVER, B. C.

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Bridges

Concrete Construction
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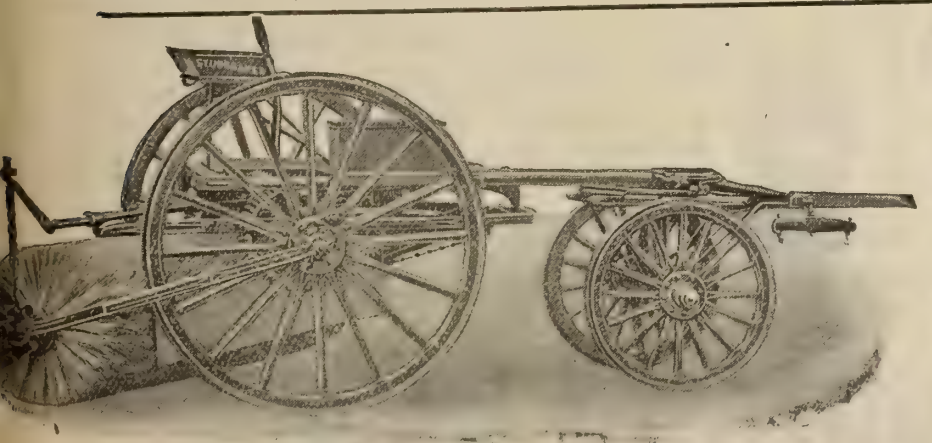


Stackpole Patent Improved **Street Sweeping Machine** Is the Standard of Perfection

Because no sweeper so effectually does the work for which it is designed as "The Studebaker." It Sweeps Clean. No sweeper is constructed with the same degree of care and mechanical precision. It Wears Well. "The Studebaker" has the smallest number of working parts, and has less gearing than any other sweeper made. It is free from all unnecessary complications. With reasonable care it does not get out of order. Send for complete descriptive catalogue.

Studebaker Sprinkler

(PATENT IMPROVED.)

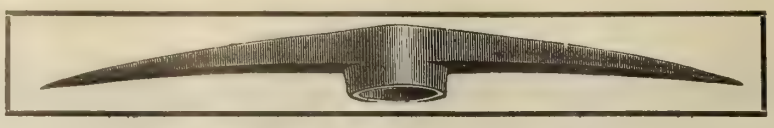
Does not clog or get out of order. Greatest width of spray Can be graded from driver's seat to any volume.

We also make an . . .

IMPROVED VERTICAL SPRAY for Pavements

Geo. Herman, Mnfr., London, Ont.

PICKS



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WHEELBARROWS

We carry a complete stock:

Navvy-Pan American
Stone, Brick, Mortar
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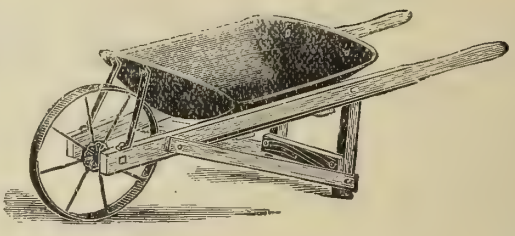
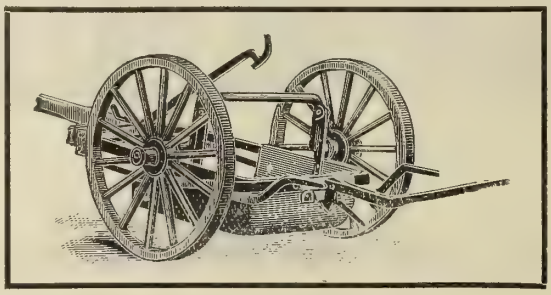
Special Concrete Barrows



WHEEL SCRAPERS

We can supply from stock any quantity of Wheelers in all capacities.

Scrapers are constructed from the highest grade material.



DRAG SCRAPERS

Our line of Drag Scrapers is most complete. We carry three styles in stock in all capacities.

Extremely low prices.
Immediate shipment.

Plows, Concrete Mixers, Hoisting Engines, Derricks, Etc.

CONTRACTORS' SUPPLIES

of all kinds

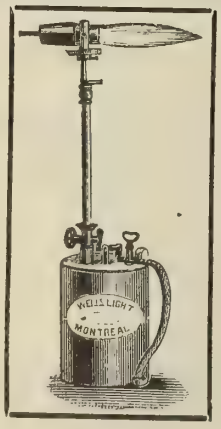
THE WELLS LIGHT

800, 2,500, 5,000 Candle Power

from Kerosene Oil

Used by all large Contractors, Mines, Railways, Engineers.

This is a portable, self contained light, inexpensive to operate, very satisfactory and is not affected by weather.



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The "Little Wonder" Size

We have had this little light specially designed to meet the present demands.

500 Candle Power

We guarantee this light to be perfect in action and when you wish to

Turn Night into Day

you can not do better than to install a Wells Light.

Let us send you our supply catalogue

F·H·Hopkins & Co.

Successors to the Late James Cooper
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CANADIAN

CONTRACT RECORD

A Weekly Journal of Engineering, Public Works, Tenders, Advance Information and Municipal Progress

This Paper Reaches Every Week the Town and City Clerks, Town and City Engineers, County Clerks and County Engineers, Leading Civil Engineers and Contractors throughout Canada, and Purchasers of Municipal Debentures.

VOL. 17. TORONTO, MONTREAL — NOVEMBER 14, 1906 — WINNIPEG, VANCOUVER No. 37

THE CANADIAN CONTRACT RECORD
PUBLISHED EVERY WEDNESDAY
As an intermediate Edition of the Canadian Architect and Builder.

THE C. H. MORTIMER PUBLISHING COMPANY
of Toronto, Limited.
Subscription Price, $2 per annum, payable in advance.

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City of Prince Albert, Sask.

ENGINEER WANTED

Applications for the position of City Engineer for the City of Prince Albert, Sask., will be received by the undersigned up to FRIDAY, NOVEMBER THE 30TH, 1906. Applicants are requested to furnish references, state qualifications and salary expected.

C. O DAVIDSON,
Secretary-Treasurer.

TOWN OF PRESTON WATERWORKS

Tenders will be received by the undersigned up to 6 p m. NOVEMBER 29TH, for the construction of a

STEEL WATER TOWER

Plans and specifications may be obtained from the Engineers, Davis & Johnston, Berlin and Galt The lowest or any tender not necessarily accepted.

C. R. HANNING,
Town Clerk.

City of Prince Albert, Sask.

DEBENTURES FOR SALE

Sealed bids will be received by the undersigned up to FRIDAY, NOVEMBER 30TH, 1906, for the purchase of $62,000 City of Prince Albert 4½ per cent. Debentures. These debentures are repayable in thirty equal consecutive annual instalments of Principal and Interest and are issued in denominations of $1000, with coupons attached.

Tenders must include accrued interest from date of issue (July 14th, 1906) to date of delivery to purchaser.

C. O. DAVIDSON,
Secretary-Treasurer.

Tenders for Central Fire Hall on Adelaide Street West, Toronto.

Separate or bulk tenders will be received by registered post only, addressed to the undersigned, up to noon on TUESDAY, NOVEMBER 27TH, 1906, for the following trades required in connection with the above building, viz.:

1—Excavation, masonry, cut stone, etc.
2—Carpenter and joiner.
3—Iron and steel work.
4—Galvanized iron work.
5—Roofing.
6—Gas fitting and plumbing.
7—Hot water heating.
8—Electric wiring.
9—Plastering.
10—Painting and glazing.
11—Tiling.

Plans and specifications may be seen and forms of tender and all information obtained at the office of the City Architect Toronto.

Envelopes containing tenders must be plainly marked on the outside as to contents. The usual conditions relating to tendering, as prescribed by City Bylaw, must be strictly complied with, or tenders will not be entertained. The lowest or any tender not necessarily accepted,

EMERSON COATSWORTH,
(Mayor) Chairman Board Control.
City Hall, November 10, 1906.

TENDERS FOR ANNUAL SUPPLIES

Tenders will be received by registered post only, addressed to the Chairman of the Board of Control, City Hall, Toronto, up to noon on TUESDAY, NOVEMBER 27TH, 1906, for annual supplies for the year, ending December 31st, 1907.

Lumber	Hardware, Etc.
Pit Gravel (screened and unscreened)	Sewer Brick
Hydrants	Sand
Lubricating Oils	Cement
Rubber Valves, Etc.	Sewer Pipe
Iron Valves and Stop Cock Boxes	Brass and Bronze Castings
Iron and Steel	Brass Work for House Services
Stop Valves	Lead Pipe
Crushed Stone	Special Castings
Paving Blocks	Kerbing and Scantling
Cedar Posts	

Envelopes containing tenders must be plainly marked on the outside as to contents.

Specifications may be seen and forms of tender obtained at the office of the City Engineer, Toronto.

The usual conditions relating to tendering as prescribed by City By-law must be strictly complied with.

The lowest or any tender not necessarily accepted.

E. COATSWORTH (Mayor),
Chairman Board of Control.
City Hall, Toronto, November 8th, 1906.

TENDERS

Tenders will be received by the Fort Steele Brewing Company, Limited, up to the 18TH DAY OF DECEMBER, 1906, for all branches of work required in the erection of an up-to-date Fireproof Brewery, with a capacity of about 30,000 barrels per year. Building to the composed of brick and iron with cement foundation and stone trimmings.

The lowest or any tender not necessarily accepted. Plans and specifications can be seen on application at the company's office. All tenders must be accompanied by a marked cheque for 5 per cent. of the amount of the bid.

Dated at Fernie, British Columbia, this 27th day of October, 1906.

ALBERT MUTZ, President,
JOHN B. SMITH, Secy.-Treas.

TOWN OF PICTON

$15,000.00 High School Debentures

FOR SALE BY TENDER

Sealed tenders, addressed to Mayor, G. M. Farrington, and marked

"Tenders for High School Debentures,"

will be received up to SATURDAY, DECEMBER 1ST, 1906, for the purchase of $15,000 00 High School Debentures of the Town of Picton.

Full particulars furnished on application to

R. A. NORMAN, Town Clerk,
Town of Picton, Ont.

N. B.—The highest or any tender not necessarily accepted.

Tenders for Storehouse at the rear of Rose Avenue Fire-hall, Toronto.

Separate or bulk tenders will be received by registered post only, addressed to the undersigned, up to noon on WEDNESDAY, NOVEMBER 21ST, 1906, for the following trades required in connection with the above building, viz:

1. Mason work, etc.
2. Carpenter work.
3. Slating and galvanized iron work.
4. Painting and glazing.

Plans and specifications may be seen, and forms of tender and all information obtained, at the office of the City Architect, Toronto.

Envelopes containing tenders must be plainly marked on the outside as to contents. The usual conditions relating to tendering, as prescribed by city by-law, must be strictly complied with, or tenders will not be entertained. The lowest or any tender not necessarily accepted.

EMERSON COATSWORTH, (Mayor).
Chairman Board of Control.
City Hall, November 10th, 1906,

[FOR ADDITIONAL ADVERTISEMENTS FOR TENDERS SEE NEXT PAGE.]

DRAUGHTSMAN

First class architectural man desires position as head draughtsman. For particulars apply to Box 100 CANADIAN CONTRACT RECORD, Board of Trade Building, Montreal.

TOWN OF SELKIRK

SEWERAGE TENDERS

Notice is hereby given that the time for receiving Tenders on the above has been extended to the 19TH INST.

THOS. PARTINGTON,
Secretary-Treasurer.

Selkirk, November 7, 1906.

TOWN OF LISTOWEL

TENDERS FOR

REINFORCED CONCRETE ARCH BRIDGES

Separate or bulk tenders, addressed to the undersigned and marked "Tender", will be received until 7 o'clock p. m. on TUESDAY, NOVEMBER 27TH, 1906, for the construction of Reinforced Concrete Arch Bridges on Main, Wallace and Elma streets, in the Town of Listowel. The aggregate length will be about 310 feet of Conduit, 36 feet span.

Plans and specifications can be seen and all information obtained at the office of W. E. Binning, Architect, Listowel.

The lowest or any tender not necessarily accepted.

A. ST. GEO. HAWKINS,
Chairman Board of Works.

Listowel, November 10th, 1906.

CONTRACTS OPEN.

PONOKA, ALTA.—C. C. Reed has taken tenders for construction of a town hall.

STURGEON FALLS, ONT.—It is reported that the paper mills here will be enlarged.

ST. JOHN, N. B.—Brown Bros. have thrown up their contract for reparing the Central Railway.

LACOMBE, ALTA.—H. A. Day will build a new block, corner Barnett avenue and Railway street.

STELLARTON, N. S.—The citizens are taking steps towards having a new post office erected.

REVELSTOKE, B.C.—The Columbia River Transportation Co. will build a large saw mill here.

ST. CATHARINES, ONT.—Tenders will be considered this week for electric lighting of the streets.

BURFORD, ONT.—The Crown Bank have purchased a site from Dr. Johnstone for a new bank building.

ALMONTE, ONT.—Taylor Bros. & Co. have purchased a site south of the market for a large coal shed.

PORT CREDIT, ONT.—A. Blower has purchased a site for new residence, in south west part of village.

BLENHEIM, ONT.—The installation of a water works system is receiving the attention of some of the citizens.

ELMIRA, ONT.—On November 26th a by-law will be voted on to raise $25,000 to establish a waterworks system.

CHATHAM, ONT.—Negotiations are under way for erection of a three story hotel to replace the Klondyke House.

SYDNEY MINES, N. S.—James Cann, of Centerville, and associates, have decided to build a modern abattoir here.

LINDSAY, ONT.—T. W. Staples and G. H. Lindsay have purchased a lot of land on which several residences will be built.

CHARLOTTETOWN, P. E. I.—The Government have decided to erect one central jail for the province, near this city.

KENORA, ONT.—The Hilliard house is being torn down and is to be replaced by a new concrete building.

PRINCE ALBERT, SASK. — The Council have refused the application of W. S. Weeks for a street railway franchise.

WEYBURN, SASK.—J. V. Mitchell has purchased a site for the new post-office, for which Mr. Jarrett is preparing plans.

MAPLE CREEK, SASK.—J. H. G. Russell, architect, Winnipeg, is preparing plans for a new rink building, 200 by 75 feet.

PETROLEA, ONT. — F. D. McDonald, Commissioner, has taken tenders for repairs to Gardner and Marshall drains.

WESTPORT, ONT.—A by-law will be voted on to grant $4,000 to the New Idea Buckle Co. to establish a factory here.

RENFREW, ONT.—S. E. Mitchell, County Clerk, wants bids by 20th inst. for purchase of $14,000 4 per cent. debentures.

SARNIA, ONT.—At a public meeting last week a resolution was carried in favor of taking immediate steps to repave Front street.

BLACKFALDS, ALTA.—A museum is to be built here by P. B. Gregson, under the auspices of the Alberta Natural History society.

ST. JOHN, QUE.—It is stated that the Singer Manufacturing Co. intend to erect a large sawmill in connection with their plant here.

STRATHCONA, ALTA.—The Town Council have passed a by-law authorizing the issue of debentures for $35,000 for electric light plant.

THAMESVILLE, ONT. — Zone Township Council will submit a by-law to the ratepayers to spend $10,000 on road improvements.

BRANDON, MAN.—It is estimated that $75,000 is needed for school purposes, including a new school in the East ward to cost $25,000.

INGERSOLL, ONT.—W. R. Smith, town clerk, will receive tenders up to November 24th for purchase of $20,000 4½ per cent. debentures.

BARRIE, ONT.—On November 29th a by-law will be voted on to grant concessions to the Dyment Foundry Co. to rebuild, at a cost of $30,000.

PARIS, ONT.—The Committee on Buildings have decided to ask the Council for an appropriation of $12,000 for addition to Kings Ward school.

WOODSTOCK, ONT. — Haney & Miller, contractors, Toronto, intend locating a branch of their business here and will erect warehouses, etc.

SELKIRK, MAN.—The time for receiving tenders for sewerage work has been extended to the 19th inst. Thomas Partington, Secretary-Treasurer.

WINDSOR, ONT.— It is probable that a by-law will be submitted to the ratepayers in January to raise money to install a municipal electric light plant.

MINBURN, ALTA.—The Massey-Harris Co. purpose erecting a warehouse here.—The East Kootenay Lumber Co. are considering the erection of a warehouse.

GUELPH, ONT. — The Light & Power Committee have recommended the installation of an ammonia plant in connection with the gas works, at cost of $2,000.

FREDERICTION, N. B. — The Board of Education have appointed Dr. Inch to report on the question of enlarging and improving the Normal school building.

REGINA, SASK. — The Hospital directors will ask the City Council to submit a by law to the ratepayers authorizing the building of a municipal hospital to cost $100,000.

LOUISVILLE, QUE.—The St. Leon Railway Co. will seek incorporation to build a railway from this place north to St. Elix, with branches to Three Rivers and Lake Maskinonge.

LONDON, ONT. — The Board of Water Commissioners have decided to ask the City Council to have the ratepayers vote on extension of waterworks system, cost $575,000.

AMHERSTBURG, ONT.—A by-law to grant aid to the Canadian Canners, Limited, for the purpose of establishing a canning factory here, will be submitted to the ratepayers on December 3rd.

WALKERVILLE, ONT. — The organization of the Dominion Dash Co. has been effected. The parties interested are Detroit men, who have purchased a site on Erie street for a factory.

HAMILTON, ONT.—John F. Shuart and Thomas Fanning have purchased building sites on Stanley avenue. S. F. Lazier, K. C., has bought fifty feet at corner of James and Maria streets.

STREETSVILLE, ONT. — The citizens are considering the building of a dam and developing power. John S. Feilding, C.E., Toronto, has been engaged to prepare plans and report.

OAK BAY, B.C.—J. S. Floyd, Town Clerk, has taken tenders for grading and macadamizing St. George street, Monterey avenue and Transit road; and construction of sewer and septic tank.

HEADINGLY, MAN. — The ratepayers have petitioned the Minister of Public Works for aid in building a bridge over the Saskatchewan river.—The C. P. R. have been asked to build a new station.

PORT ARTHUR, ONT. — By-laws have been carried to guarantee $75,000 bonds of the Meisel Manufacturing Co. to establish works here, and to loan $15,000 to the Seamen, Kent Co. to erect a factory here.

WINGHAM, ONT.—W. Dore is considering the erection of additions to his carriage factory.—The Municipal Council have passed a by-law to issue $16,500 debentures for site and erection of High School building.

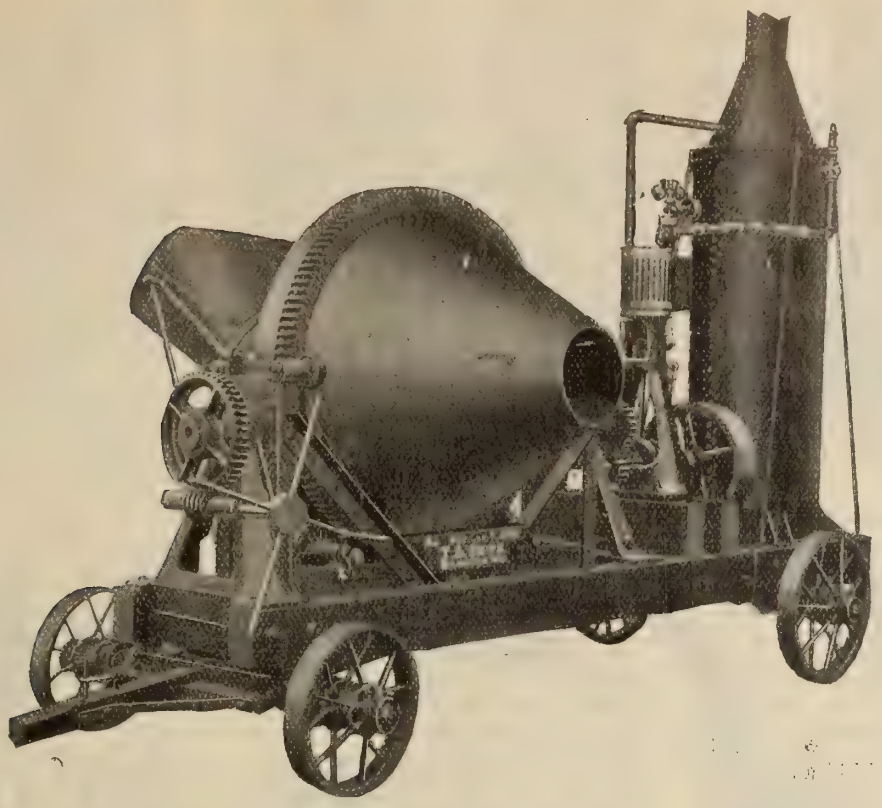
BRAMPTON, ONT.— Peel County Council have decided to spend $100,000 for the improvement of 100 miles of the main country roads.—T. S. Beck is one of a committee to have plans prepared at an early date for a new music hall.

MINNEDOSA, MAN.—Members of the Board of Trade are organizing the Minnedosa Power Co., for the purpose of developing a water power near this town. Colonel Ruttan, of Winnipeg, has made a favorable report on the site.

FREDERICTON, N. B.—C. H. LaBillois, Commissioner of Public Works, desires tenders by Monday, 19th inst., for building Young's bridge over the Magaguadavic river in Charlotte county, also for building McElwain's bridge in York county.

SYDNEY, N. S.—The Sydney Abattoir Co. have secured options on sites for their new building. Arrangements for its construction are being made.—The City Council have accepted the proposals made by promoters of the railway construction plant, granting a bonus of $50,000.

QUEBEC, QUE.—Mr. Legare, fruit merchant, will have a two story warehouse erected north east of the Champlain market.—The Canadian Northern Quebec Railway is asking for an extension of time for its branch and the main



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Two thousand machines in the field tell the same story by their successful operation. Ask some reliable contractor near you what he knows of this machine. He probably owns a Smith Mixer. If so we will be pleased to abide by **his** verdict, for **he knows.** Ask him whether the machine is durable, what he thinks of the design and workmanship. Find out whether this machine ever fails to mix concrete thoroughly; whether its proven capacity fulfills our guarantees; whether it is easily operated; a strong leader in the number sold, and a **money saver to the contractor.**

You know a **thorough knowledge** of any machine leads to a **correct judgment** concerning it. If you get **the facts** regarding the Smith Mixer, **the argument** will take care of itself.

Send for a Catalogue. - Inquire Prices.

W.H.C.MUSSEN & CO.

Railway, Mining and Contractors Supplies

MONTREAL

line to Randow.—The Ross Rifle Co. will probably move their plant to some other point in Western Canada.

ST. THOMAS, ONT.—N. R. Darach, architect, is this week taking tenders for fencing, concrete walks, etc., on military grounds.—Negotiations are going on regarding the new canning factory proposed to be erected.—Moody & Clark propose erecting a pork-packing establishment to cost $7,000.

TORONTO JUNCTION, ONT.—The Bank of Hamilton have purchased the Kilburn block, corner Dundas and Van Horne streets, which they will have remodelled at cost of $10,000.—Building permits have been issued as follows: S. C. Heston, two-story frame dwelling, Vernon avenue, $1,400; C. H. Frost, one-story brick cottage, Clair avenue, $1,200.

CALGARY, ALTA. — The City Council have selected a site for the new waterworks station.—Sir John Langman, the English coal mine owner who recently visited Calgary, has decided to build a four story block on Stephen avenue.—The City Council have decided to construct an asphalt pavement on Stephen avenue, to extend for twelve blocks.

LETHBRIDGE, ALTA.—It is understood that the News Printing Co. intend erecting a brick office building on Clubb street.—The congregation of St. Augustin's church are considering the erection of a new church to cost $20,000.—The establishment of a government creamery here is being considered. M. Barford is interested.

VICTORIA, B. C.—Maxwell Muir, architect, has taken tenders for alterations to the Heathorne block on Langley street.—A by-law to raise $50,000 for purchase of land for exhibition purposes and erection of buildings thereon will be submitted to the ratepayers this week.—Hutchison Bros., electricians and machinists, have formed a new company and purpose erecting new buildings consisting of a machine shop 60 x 60 feet, and a boat shop 60 x 50 feet.

BRANTFORD, ONT.—Government Engineer Fairbairn, reporting on the proposed G. T. R. switch to Holmedale, says the front route will cost $26,500 and the rear route $53,000.—Representatives of John Crossley & Sons, Halifax, and A. F. Stoddard & Co., Elderslie, Scotland, have been inspecting sites here for a carpet factory.—It is reported that the C. N. R. will build a line to this city from Toronto. — W. Goodwin, Brunswick street, will erect a double brick house, cost $1,700.

MOOSE JAW, SASK.—The Council have appointed a committee to examine the power plant at Winnipeg in connection with the proposed enlargement of the plant here. — F. M. Rattenbury, architect, of this city, is preparing plans for a new hotel to be built by the Grand Trunk Pacific Railway at Prince Rupert, the Western terminus of the road. The building will cost about $50,000.—The ratepayers last week defeated the by-law to provide $300,000 for waterworks purposes.—The C. P. R. will, at next session of Parliament, apply for authority to build a new line from Weyburn westward 100 miles.

SEAFORTH, ONT.—M. G. Cameron, M.P.P., representing the Maitland River Power Co., last week had an interview with the Town Council in connection with their proposition to furnish Seaforth with electric power. This company propose to develop a water power on the Maitland river near Goderich, at a probable cost of $300,000. The town of Goderich have passed a by-law guaranteeing the bonds of the company to the amount of $150,000.

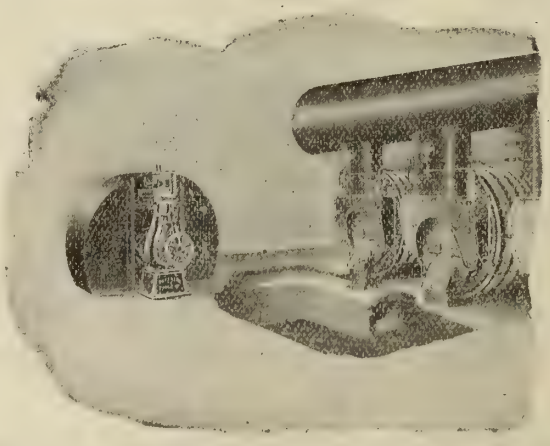
OTTAWA, ONT.—It is reported that the Rideau Navigation Co. will build another new steamer.—F. Gelinas, Department of Public Works, will receive tenders up to November 26th for building addition to the Parliament Buildings.—Tenders will soon be called for erection of an entrance hall on front of Rideau Hall to cost $100,000.— The building committee of the Y.M.C.A. have been instructed to have plans prepared for the new building.—The Property Committee of the City Council recommend an addition of two stories to the City Hall.

GODERICH, ONT.— By-laws were carried here on Saturday last to loan $50,000 to the Goderich Wheel Rigs Co., and granting free electric power to the Jackson Clothing Co. — J. B. Kelly, engineer for the electric light plant, has submitted a report to Council on the cost of increasing the plant to 4,000 lights capacity and installing new street lighting equipment. His figures are: One 4,000 light generator with switchboard, 45 arc lights and regulator $6,500; generator foundation and belt, $400; shafts, pulleys, etc., $1,000; new boiler and brick work, $1,500; new foundation for large engine, $1,000; air pump, condenser, etc., $1 800, a total of $12,200.

MONTREAL, QUE.—Dr. E. Dubeau will erect a three story stone and brick apartment house on Sherbrooke street, cost $30,000.—The Pratt and Letchworth Malleable Iron Co. purpose moving their Brantford plant to this city.—Application has been made to the International Waterways Commission for endorsation of a scheme to build a canal from Lake Champlain to this city.—The C. P. R. have secured a permit to construct a two story building, 176 by 87 feet, on Osborne street, cost $38,000.—The Canadian Brewing Co. will make alternations to their brewery on St. Dominque street, cost $10,000.—Negotiations are said to be under way for the building of a new million dollar hotel here.—At a meeting of the Protestant School Committee last week, a committee was appointed to report on further school accommodation, particularly in the suburbs.—A proposal is now being considered to use the St. Lawrence Market site for a new Technical School and Civic library building.

WINNIPEG, MAN.—It is understood that plans have been prepared for a branch factory for Gaar, Scott & Co., Richmond, Ind., who purpose locating here.—B. Gardner & Co., wholesale clothiers, intend erecting a two story brick factory.—Woods Limited, of Ottawa, will locate here and expect to build a warehouse.—The Civic Water Supply Commission will have engineers report on the scheme to bring water to the city from Shoal lake.—It is expected that the Winnipeg Electric Railway will make extension along Taylor and Minto streets.—The Central Canada Loan & Savings Co. purpose erecting a block next spring on the corner of Main and Notre Dame east.—The Inter-Ocean Real Estate Co. have sold to Eastern capitalists a 66 foot lot on Lombard street, and the purchasers intend erecting a 15 story office building theron.—It is understood that the Fire, Water & Light Committee will call for tenders this winter for water pipe and specials to the value of $150,000.—F. C. Bell has purchased the Moore Printing Company's building, corner of Princess street and Cumberland avenue, and proposes adding two stories in the spring.—C. A. Milliken, who has just made a series of surveys of the possible outlets of Shoal Lake, reports that a gravity system from that lake to provide a water supply for Winnipeg would be perfectly feasible.

VANCOUVER, B. C. — The B. C. General Contract Co. will erect a warehouse, corner Columbia and Front streets, cost $3,500.—It is understood that tenders will be called early in January for construction of 40 miles of the V. W. and Y. Railway, northward from this city.—Building permits have been issued as follows: C. Church, frame dwelling, Sixth avenue, $2,000; J. Caldwell, two frame dwellings, First avenue, $4,000; A. McNutt, frame dwelling, Princess street, $1,000; John F. Ross,



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LINE MATERIAL . . . . . .
FIRE ALARM APPARATUS . . . . .

PRINCIPAL OFFICE AND FACTORY - - Aqueduct Street, MONTREAL

dwelling, Graveley street, $1,000; B. F. Crysdale, dwelling, Homer street, $1,300: F. Allan, dwelling, Ninth avenue, $1,000; Capt. Pybus, dwelling, George street, $1,000; Mark Gormley, dwelling, Richards street, $2,000; R. S. Sherman, dwelling, Sixth avenue, $1,500; W. G. Elliott, dwelling, Columbia street, $1,300; W. Gormley, dwelling, Seymour street, $2,000; Barber & Co. purpose erecting a three story factory, 50 by 100 feet, on Dufferin street, cost $4,000.—The Board of School Trustees have decided to build a 4-room addition to Fairview school, a 12-room addition to Lord Roberts school and an 8-room addition to Seymour school.—The Hastings Shingle Manufacturing Co. intends building a new mill.

TORONTO, ONT. — Tenders are wanted from all trades for addition to Parliament Street Methodist Sunday School. Plans at 236 Carlton street.—The Soveriegn Bank and the Manufacturers' Life Insurance Company have jointly purchased the property at the south-east corner of King and Bay streets, including about 39 feet on King street, 170 feet on Bay street and 83 feet on Melinda street. The purchasers intend erecting a first-class office building on the site.—The Board of Control desire tenders by Wednesday, 21st inst., for masonry, carpentry, painting and glazing and slating and galvanized iron work for erection of store house at rear of Rose avenue fire hall.— J. P. Hynes, architect, is receiving tenders for erection of a three story hotel, brick and steel construction, corner Queen and Carroll streets, for S. D. Ramey.—A. J. Rattray, architect, is calling for tenders this week for erection of a three story factory, 100 by 35 feet, corner Camden and Spadina ave., for Merchants' Counter Check-book Co.—The Board of Control will receive tenders up to November 27th for annual

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LIMITED.
TORONTO, CANADA.
IRON

"BULL DOG" SHOVELS

forged from one piece of High Carbon Bar Steel without weld or rivet, solid neck and blade, tempered in oil, straight chucked handle can be replaced when broken.

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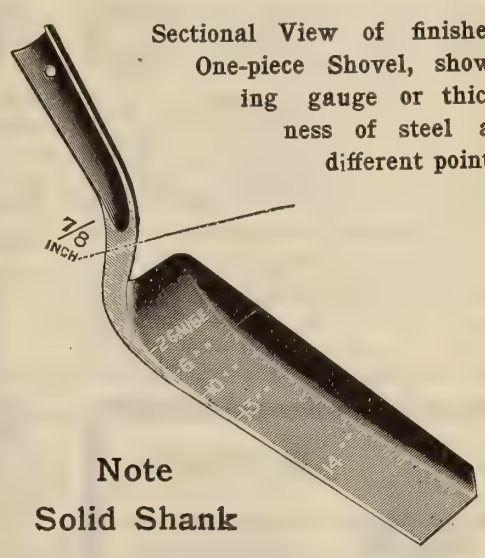

Sectional View of finished One-piece Shovel, showing gauge or thickness of steel at different points

Note Solid Shank

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This Machine makes all blocks face down—"the only practical way"—allowing of a richer and finer facing, producing blocks that are perfect in appearance and impervious to moisture.

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supplies of lumber, hydrants, valves, iron and steel, sewer brick, cement, castings, lead pipe, sewer pipe, etc.—Tenders wil be received at the same office up to November 20th for construction of bitulithic pavement on Clarendon, Blong and Balmoral avenues, Collier, Dupont and Mutual streets, also for other work.—The Dominion Radiator Co. have purchased a site on Dufferin street on which they intend establishing a factory to cost $200,000.—The G. T. R. and C. P. R. have approved of the plans for the Yonge street bridge.—York Township Council have been asked for a grant of $17,000 for a new school for section No. 20.—The City A chitect has completed plans for the new central fire hall on Adelaide street west.—Tenders are being called for additions to Rose avenue fire hall.—S. F. McKinnon has sold a site on Wellington street west to a Montreal Company, for a large warehouse.— The plans for the new branch libraries will not be prepared until the Yorkville branch has been completed.—The City Engineer has prepared the details of the trunk sewer by-law for $2,000,000, to be submitted to the ratepayers January 1st.—The Board of Education and University Governors are considering proposals to build a Technical High School, Model School for Public School teachers, and a Model School for High School teachers. — The City Council gives notice of its intention to construct asphalt pavement on Simpson ave., cost $2,578; macadam pavement on Dupont street, cost $3,343; vitrified block pavement on Catherine street, cost $4,204.—The G. T. R. shops are to be removed from the Esplanade to New Toronto.—Architects have been instructed to prepare plans and call for tenders for the enlargement of the church of St. Mary Magdalene, at a probable cost of $25,000.—Tenders will be received by the Board of Control up to Tuesday, November 27th, for all trades required in the erection of a central firehall on Adelaide street west. Plans at the office of the Ciry Architect. — Messrs. Edmanson, Bates & Co. purpose erecting an office and factory building, corner Adelaide and Duncan streets. — The Sherwin-Cooper Co. are seeking a site for their gasoline engine and launch works.

CONTRACTS AWARDED.

ROSTHERN, SASK.—Erection of fire hall: James Kelly, contractor.

ARNPRIOR, ONT.—New woodenware factory: S. R. Rudd, contractor, $2,397.

PRESTON, ONT.—Construction of foundation of water tower: E. Wirseking, contractor, at $945.

CHESLEY, ONT.—Erection of new iron bed-stead factory: Mr. Stevia, Hanover, contractor.

NELSON, B. C.—New court house: W. G. Gillett, successful tenderer, $74.990.

OWEN SOUND, ONT. — Revetment wall on west side of harbo r Green, McKinnon & Co., successful tenderers.

ALMONTE, ONT.—Erection of furniture warehouse on Hill Street for W. E. Scott: W. Clement, contractor.

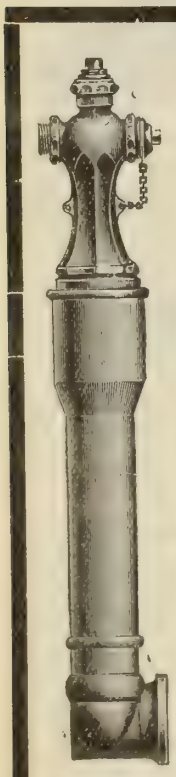
DANVILLE, QUE.—Erection of convent for Congregation of Notre Dame: D. Parso, contractor, cost $24,500.

VANCOUVER, B. C.—Construction of fire scows for Macdonald, Marpole & Co.: Wallace Shipyards, False Creek, contractors.

BRACEBRIDGE, ONT.—Construction of Bracebridge & Trade Lake railway from the town to Lake of Bays: Geo. A. Begy, St. Catharines, contractor.

MONTREAL, Que.—Construction of Quebec, Montreal and Southern railway, from Princeville to St. Philomene, 48½ miles: O'Brien & Mullarkey, contractors.

TORONTO, ONT.—Excavation and substructure of Lansdowne Ave. Subway: Godson Contracting Co., successful tenderers, cost $48,369.—New boat for R. & O. Navigation Co.: Canadian Ship-build



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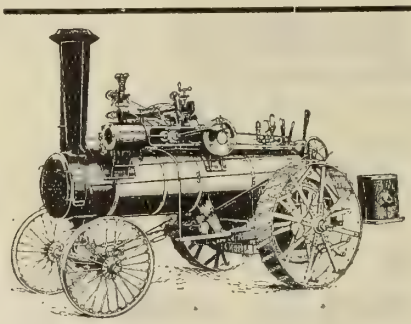

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We carry in stock large quantities of well matured
Reinforced Concrete Pipe
In 6, 8, 10, 12, 15, 18, 21, 24, 27, 30 and 36 inch; also an Egg shape Sewer Pipe 2 ft. x 3 ft.
This pipe is Frost Proof and practically indistructible.
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Some Recent Contracts:—		
	Toronto 31,441 sq. yds.	Chatham 15,633 sq. yds.
	Halifax 30,000 sq. yds.	Amherst 8,000 sq. yds.
	Regina 21,215 sq. yds.	St. Catharines 4,600 sq. yds.
	St. Boniface 18,272 sq. yds.	Total . . . . 129,161 sq. yds.

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Head Office: 164 Bay Street, TORONTO
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HIGH GRADE GERMAN BRANDS FOR GRANOLITHIC AND ARTIFICIAL STONE SIDEWALKS.
Sewer Pipes, Culvert Pipes, &c. Best English Cements. Best Belgian Cements
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JOSSON CEMENT
Is the Highest Grade Artificial Portland Cement and the Best for High Class Work. Has been used largely for Government and Municipal Works.
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REINFORCED CONCRETE CONSTRUCTIONS
FOR
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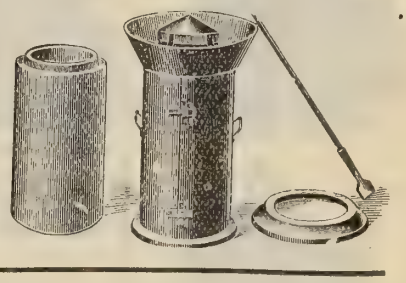
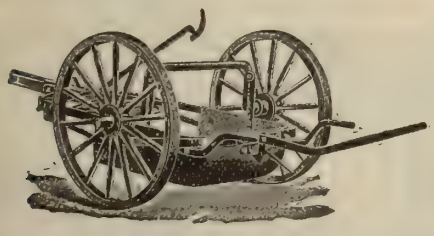
ROBINSON'S PATENT MOULD
for Cement Culvert Pipe
With or without Cone Top Filler. These Moulds are standard both in sizes and thickness of wall. Furnished with plain or telescopic joints. Write for Catalogue.
CLIMAX ROAD MACHINE CO.
HAMILTON, ONT.





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Toronto and Winnipeg
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Drag Scrapers (Solid pressed bowl)
Wheel Scrapers (pressed or square bowls)
Dump Cars, from 1 to 3 yards
Wheelbarrows, Wood or Steel Trays
Waggons, Carts, Cement Mixers, Etc.
Prompt delivery from stock at Toronto and Winnipeg.
Send for complete catalogue. Write nearest office.

Spigot and Faucet Pipe — Flanged Pipe — Turned and Bored Pipe
MADE IN 12' 0" LENGTHS 3 TO 48 INCHES DIAM.

MADE IN SEVERAL WEIGHTS PROVED FROM 100 TO 700 LBS.

AND SPECIAL CASTINGS
"THE WORLD'S STANDARD FOR ACCURACY, QUALITY AND FINISH."
WE ARE PREPARED TO QUOTE DELIVERED PRICES, AND MAKE PROMPT DELIVERIES IN ANY PART OF CANADA
L. H. GAUDRY & CO., Canadian Agents for Robt. Maclaren & Co., Glasgow. QUEBEC AND MONTREAL

ing Co., successful tenderers, cost $250,000.

WINNIPEG, MAN.—Supply of 10,000 bags of cement for St. Andrew's rapids: Owen Sound Portland Cement Co., successful tenderers, at about $2.75 per barrel.

SASKATOON, SASK.—John Gunn & Sons, of Winnipeg, have been awarded the contract for the substructure of the Grand Trunk Pacific bridge over the Saskatchewan river at this place.

BELLEVILLE, ONT.—Rodgers & Quirk, of Montreal, have been given a contract to grade a line of railway from the Grand Trunk line to Point Ann, a distance of six miles.

LETHBRIDGE, ALTA.—New woolen mill building: Rex Virtue, contractor, about $25,000.—It is reported that the contract for the steel work on the C. P. R. bridge here has been awarded to the Dominion Bridge Co. for $780,000.

FIRES.

Hardware store of L. C. Gignere, Valliere's furniture store and other buildings, St. Rock, Que., loss $40,000.—John Logan's brick yards, Greenwood ave., Toronto, loss $6,000.—Roman Catholic church and other buildings at Grand Falls, N.B., loss $60,000.—Ungar's laundry, W. F. & J. W. Myers' shops, and other buildings, St. John, N. B., damage $25,000.—Buildings of J. H. Gignae, wood dealer, St. Rocks, Que., damage $12,000.—Stables of Windsor Hotel and H. Howie, Belleville, Ont., loss $5,000.

The Colonial Portland Cement Company, of Wiarton, Ont., have placed an order with the Owen Sound Iron Works Company for three large slurry pumps, three feed pumps and two steel smoke stacks.

ASSOCIATE ENGINEERS.

The board of constructing engineers to be associated with Mr. C. B. Smith in the construction of the Winnipeg power plant at Point du Bois Falls has been selected. It will be composed of Prof. Louis Herdt of McGill University, Montreal, as electrical engineer, H. N. Ruttan, City Engineer, Winnipeg, as hydraulic engineer, and Wm. Kennedy, jun., of Montreal, as mechanical engineer.

BUILIDNG IN OCTOBER.

In Vancouver the value of buildings for which permits were granted during October was $292,845. For the corresponding month of last year the amount was $214,255.

The Regina building permits issued for ten months were 395, valued at $1,600,000.

The building in Edmonton, Alta., for the month of October totalled $307,928.

In Brantford, Ont., the value of building permits for October was $58,585.

Building permits at Stratford, Ont., numbered 330, to the end of October, and were valued at $386,445.

Joseph Giroux, contractor, Montreal, has made an assignment.

NOTES.

Small gas pipes laid in cinders in the Norweigian Hospital, Fourth Ave. and 46th St., Brooklyn, N.Y., were found a short time ago to be almost entirely destroyed. These pipes were 3/8 and 1/2-in. gas pipe laid about 1 1/2 ins. deep in the cinder fill about the girders. The pipes had to all appearances been destroyed by electrolysis, but tests failed to show any stray electric currents. Moreover, as all pipes except those laid in the cinder were intact, the destruction was doubtless due to the composition of the ashes, possibly to sulphuric acid contained in them.

Why have watering-carts in the streets? A German town is about to make an experiment in the direction of running perforated pipes along the streets by the side of the kerbstones. Whenever there is need for it the water will be turned on for a few minutes and a beautiful spray will be thrown from each side of the street into the roadway. It is estimated that the saving in horseflesh and watering-carts will soon repay the capital outlay, while the advantages of a sudden flush of the streets is that an evenness of moisture can be secured which is not accomplished by the peripatetic cart. In very dry weather, of course, this will be an effective way of flushing drains.

GERMAN ALSEN, at higher prices than competitors has again this year been awarded the most important contracts of the World because practical tests by leading Engineers proved its merit and relative economy. Note the following:

		1905—1906		1905—1906
MEXICO CITY		120,000 bbls.	U.S. PHILIPPINE GOVMT. ORDER	40,000 bbls.
NECAXA DAM	(shipping instructions so far 60,000 bbls) approximate amount	175,000 bbls.	GOVMT. ORDER SOUTH AMERICA	150,000 bbls.
XOCHIMILCO WATER WKS., MEX.	approximate	200,000 bbls.	RIO DE JANEIRO, SANTOS, ETC.	40,000 bbls.

- Also enormous quantities for the PACIFIC COAST, AUSTRALIA, ENGLAND, SOUTH AFRICA, &c. -

There is always a certain trade who will pay for the best. We also make American Alsen, the highest grade of domestic Portland cement.

CEMENT 45 BROADWAY, NEW YORK CITY *We protect our customers!* **CEMENT**

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Wire Screens for Road Making

Wrought Iron and Wire Guards and Enclosures for Jails, Asylums, Etc.

The Geo. B. Meadows, Toronto Wire, Iron & Brass Works Company Limited

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GALVANIZED WIRE WOUND WOODEN PIPE

No frost breaks, no corrosion. No electrolysis. It is easily and cheaply laid.
Its carrying capacity is never decreased by rust.

JAMES THOMSON, President. J. G. ALLAN, Vice-President. JAMES. A. THOMSON, Secretary. ALEX. L. GARTSHORE, Treasurer.

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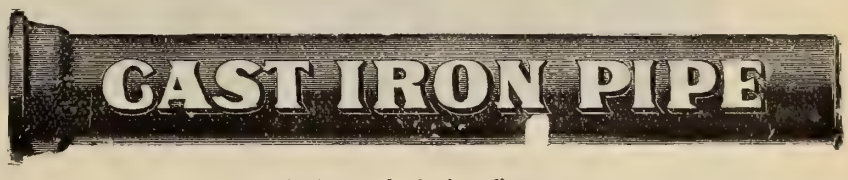
Manufacturers of

Flexible and Flange Pipe, Special Castings and all kinds of Waterworks Supplies.



3 inches to 60 inches diameter.

for Water, Gas, Culvert and Sewer

HAMILTON. ONT.

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Montreal Pipe Foundry Co., Limited

Special Castings
Flange Pipe
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Valve Boxes and general Water Works Supplies

Works at: LACHINE, QUE. THREE RIVERS, QUE LONDONDERRY, N. S.

Combined daily capacity: 175 Tons Pipes and Castings.

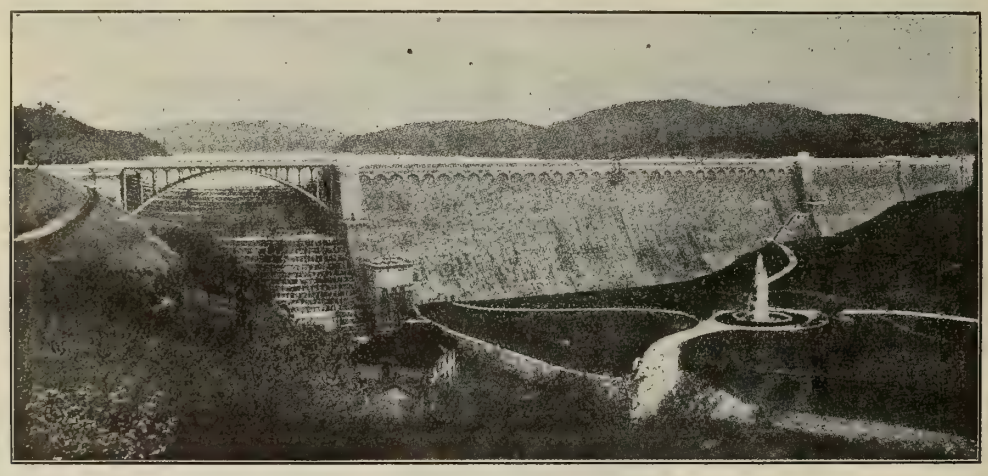
HEAD OFFICE CANADA LIFE BUILDING, MONTREAL

THE NEW CROTON DAM

The newest and greatest of the dams upon the Croton River, which is to impound 30,000,000,000 gallons of water for the consumption of the city of New York, is pronounced finished at last, after thirteen years occupied in its construction. The gates in the dam were closed some sixteen months ago, and since then, says Public Works, no water has flowed in the bed of the Croton below the new dam. It is doubtful, indeed, if any water will flow there henceforth, since the demands of the great city are much in excess of the average inflow of the Croton basin, and only in the rapid thawing of the snow in the early spring and the reultant freshet is there any great preponderance of supply over demand. In one such spring freshet day of 1905, however, there was an estimated inflow of 1,500,000,000 gallons and in three days the height of water in the reservoir rose to 14.48 ft. But the water in this new reservoir is the overflow from the spillways of about a dozen reservoirs higher up the Croton River and its tributaries, whose aggregate capacity is nearly 44,000,000,000 gallons. Two other dams and a diverting basin are under construction in the Croton watershed, which will add about 24,000,000,000 gallons to the storage capacity and will bring the total supply to about 102,000,000,000 gallons. This must suffice until the new water-source in the Catskill Mountains can be made available, which cannot be too soon accomplished, for the consumption of water by the city has reached the appalling daily average of 320,000,000 gallons. As the population of New York is growing with great rapidity, this consumption is sure to increase in like ratio, while the new works on the Croton have exhausted the capacity of that watershed.

The new Croton dam is a handsome work of solid heavy masonry, and has cost $7,631,189. Its completion makes possible some interesting comparisons with the great Wachusett dam which impounds a potential total of 63,000,000,000 gallons of the water of the Nashua River for the use of the metropolitan water district of Boston, Massachusetts. This latter work has been described quite fully in Public Works, both during its construction and soon after its completion last December. It will be seen that owing to the especially favorable location of the Wachusett dam its cost was much less, and the time expended in its construction was less than one-half that consumed in building the new Croton dam, though the capacity of the Wachusett reservoir is more than double that of the new Croton. The appended table gives the comparative figures:—

	Wachusett.	Croton.
Total length, dam and spillway (ft.)	1,496	2,168
Height, foundation to crest "	228.2	297
Width at base of foundation "	180	216
Width at crest "	25.75	18
Depth of foundation "	93	140
Height, ground level to crest "	107	157
Length of main dam "	971	1,168
Length of spillway "	452	1,000
Earth excavated in building (cub. yds.)	258,600	1,750,000
Rock "	99,350	425,000
Masonry in dam "	273,000	.....
Storage capacity (million gallons)	63,000	30,000
Time of building	5 years	13 years
Cost	$2,173,159	$7,631,189



THE NEW CROTON DAM.
Its storage capacity is 30,000,000,000 gallons, and it has cost $7,631,189 to construct.

LEGAL.

Judgement has been delivered in favor of plaintiff in the case of King vs. Town of Palmerston, awarding $5,000 damages for the death of T. G. Burns, of Palmerston, who died from the shock of an electric wire, alleged to be due to a defect in the lighting system. Wm. King, the administrator of the estate, aked for $10,000.

The Halifax Electric Tramway Company hav e won a notable case in the Supreme Court before a jury. Dr. Mader, of that city, two years ago obtained a verdict awarding him about $7,000 for damages alleged to have been sustained while driving over snow thrown up from the company's tracks. After appeals had gone through the Supreme Courts of Nova Scotia and of Canada, a new trial was ordered, with the result now that the jury awards Dr. Mader no damages, but finds him negligent in his driving.

Judge Anglin, in deciding the cases of the Keewatin Power Company, brought against the Town of Kenora, declares that the power in all navigable rivers belongs to the Crown. The action was brought to restain the Town of Kenora from prosecuting expropriation proceedings in a branch of the East Winnipeg river. The eastern bank is owned by the Hudson Bay Company, the western bank by the Keewatin Power Company. The town of Kenora leased the bed of the river and proceeded to construct a dam for power purposes, and to expropriate land on either side for this purpose. The owners of the two banks claimed that their title was to midstream. Justice Anglin says: "By nothing short of an express grant should the Crown be held to have parted with its title to the alveus of our navigable rivers." The Crown grant gives title only to the water's edge. A natural obstruction in the course of an otherwise navigable river does not deprive the river of its navigable character. The case will probably go on to the privy council.

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THE ELECTRIC PLANT AT DAUPHIN, MANITOBA.

Electrical work at Dauphin, Man., is in a very flourishing condition. This plant, which is owned by the town, was started on the 27th of January last. The power house is a one story and basement brick structure 45 x 70 feet over all, covered with iron roof. It is divided into two parts by a sold brick fire wall, one part being used for the boiler room and the other for dynamo room, with a small store room built in one corner. The boiler room is 40 x 45 feet, and contains two Robb-Armstrong boilers each of 100 horsepower.

Electric Power Station, Dauphin, Man.

The dynamo room contains a 100 horsepower Robb-Armstrong high speed engine, direct connected to a 65-kw revolving field 2100-volt, alternating current Westinghouse generator.

The switchboard has oil switches and all the latest appliances. There is also a series alternating arc circuit panel and regulator for the arc street lamps, of which the town has already got fifteen in use, all of Westinghouse make. The town has about four miles of pole line already up, and supplies current for about 2200 lights at the time of writing, the meter system being used. The demand for more electric lights is rapidly

Interior of Dauphin Electric Power Station.

increasing, not only for the many new buildings which are going up, but for many of the present buildings which have not been wired. The entire plant and wiring installation is in charge of Mr. Alf. C. Parkin, who was formerly in charge of the Gravenhurst, Ont., plant. Mr. W. A. Brinkman is the engineer at the plant. The town is now doing all the wiring and installation of lights, but at first most of the wiring throughout the town was done by Mr. R. S. Gordon, of the Jones & Moore Electric Company. An extra use to which the boilers at the plant are put is the supplying of heat for the municipal buildings and fire hall, the feed and return pipes extending under ground a distance of about 500 feeet from the boilers to the hall.

THE DISPOSAL OF REFUSE.

Garbage and refuse trains, hauled by electric locomotives, will be used at Dublin, Ireland, in connection with a new refuse collection and disposal system. The system was described by Mr. W. F. Goodrich, of London, in a paper on "Refuse Disposal in 1906," read before the Cork Congress of the Royal Institute of Public Health as follows:

During the daytime, instead of carting all the refuse to the destructor in Stanley street, sufficient only will be carted direct there from the destructor to keep the plant in full work. The remainder of the refuse will be carted to the tramway depot at South Gloucester street and tipped into large tank tipping wagons; during the night these vehicles will be hauled by electric locomotives over the tramway track to the destructor works. Each locomotive will convey a train of tipping wagons containing from 75 to 80 [long] tons of refuse, so that in a single journey the whole of the refuse not carted during the day may be taken direct to the destructor works. While only one tramway depot will be used for refuse storage at first, it is intended later to equip other depots; these, with the first depot, will be used not only for storing refuse, but also for storing mud and street sweepings, which, like the refuse, will be stored in tank tipping wagons and taken by electric locomotives to the Fairview Sloblands—suitable land for reclamation, which will take 70,000 [long] tons of mud per annum for twenty years, the ultimate intention being to convert this tract of 57 acres, which faces the sea, into a public park. This is a scheme of which the Dublin authorities may be justly proud. In so far as the haulage of refuse over the tramway track by electric locomotives is concerned the scheme is unique and of the highest interest; so far as I am aware, Frankfort-on-the-main being the only other city in Europe where a similar method of refuse haulage has been adopted.

The new destructor plant will include two four-grate Meldrum destructors of the regenerative back-fed type, having a guaranteed capacity of 120 long tons per 24 hours. These will supply steam to two Babcock & Wilcox boilers, each having 1,741 square feet of heating surface and working at a pressure of 200 lbs. per square inch. The refuse will be stored in two hoppers, each 7 x 22 ft. x 11½ ft. deep, placed at the back of the cells. An overhead railway, with eight travelling clinker cars, will be provided. A separate building will house a mortar mill and also "a tin crushing revolving screen," the latter for handling tin cans. The contractor guarantees an average temperature of 2,000° F. in the combustion chamber, and a steam production of 11,200 lbs. per hour at a working pressure of not less than 175,000 lbs. per square inch; also, a labor cost per ton of refuse destroyed, taking local wage rates into account, of 6½d. per long ton (11½ cents per short ton).

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Page
Ontario Accident Insurance Co. 19

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Electric Blue Print Co. 7

BLOWERS
Buffalo Forge Co. 4

BRIDGES (CONCRETE)
Steel Concrete Co. 15

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Canadian Bridge Co. 19
Canada Foundry Co. 23
Dominion Bridge Co. 15
Jenks & Dresser 16
Phoenix Bridge and Iron Works 15

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Alsen Portland Cement Co. 9
Bremner, Alex 6
Currie & Co., W. & F. P. 20
DeSola, C. I 7
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Hyde & Co., F 22
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Lakefield Portland Cement Co. 14
McNally & Co., W. 7
Morrison & Co., T. A. 20
Morgan, T. M. 15
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Hopkins & Co., F. H. 24
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Toronto Pressed Steel Co. 7

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Dartnell, E. F. 6
Hopkins & Co., F. H. 24
Mussen & Co., W. H. C. 3
Morrison & Co., T. A. 20

DEBENTURES
Nay, Anderson & Co. 22
Stimson & Co., G. A. 21

DRILLING CONTRACTORS
Page
Harvey, J. 20
Peat & Sons, James 14

ENGINEERS AND CONTRACTORS
British Columbia General Contract Co. 23
Canadian White Co. 6

ENGINEERS (CIVIL)
Archibald, George H 15
Chipman, Willis 17
Connor, Clarke & Monds 17
Davidson, Shirley 21
Davis, Johnston 15
Fielding, John S. 7, 13, 17
Galt, John 7
Jackson, John H. 17
Lea & Coffin 17
Leofred, A. 21
McConnell, Brian D. 13
McDougall & McRae 7
Parke, Roderick J. 17
Scott, Wm. Fry 21
Simpson, T. T 21

ENGINEERS (MECHANICAL)
Farmer, John T 21
Galt, John 7

ENGINES
Cameron & Co, Hugh 16
Sawyer & Massey Co 6

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PIPE (CONCRETE)
Page
Dominion Concrete Co. 6

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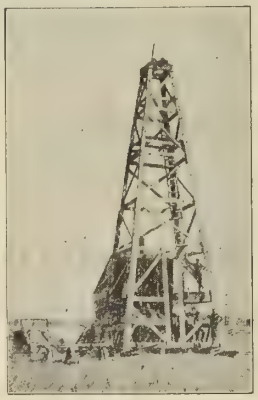

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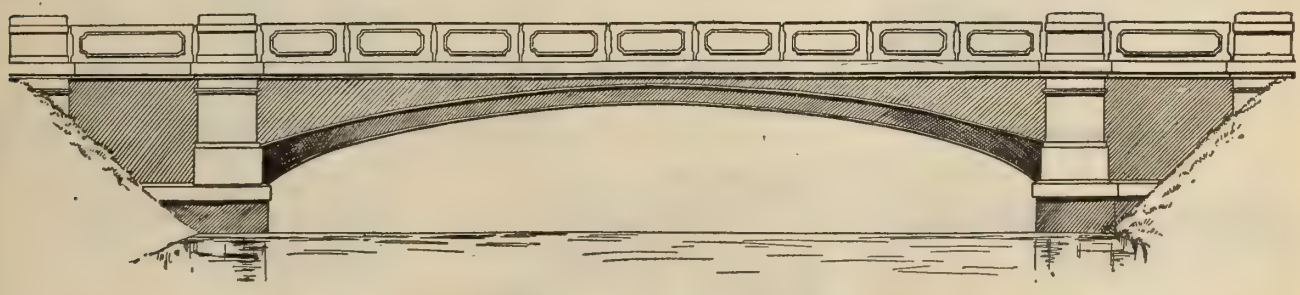

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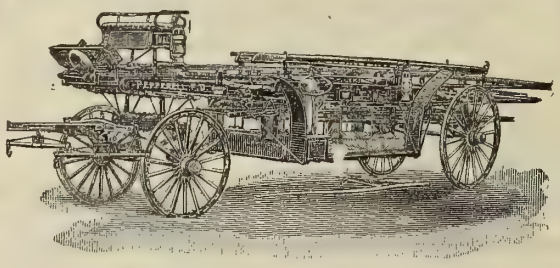

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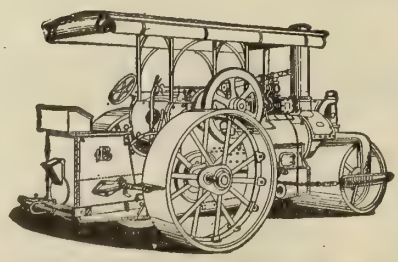

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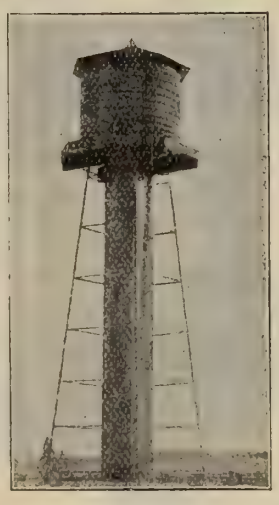

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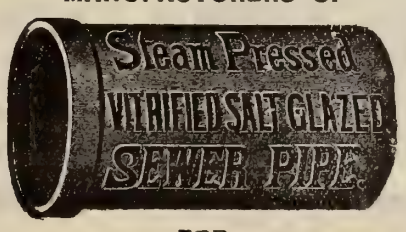

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					Initial	Final	1 dy.	7 dys.	28 dys.	3 mos.	1 yr.	1 dy.	7 dys.	28 dys.	3 mos.	1 yr.
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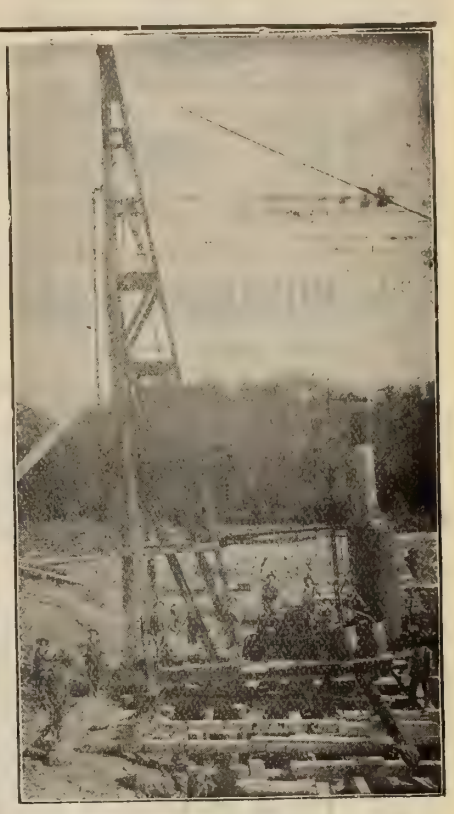

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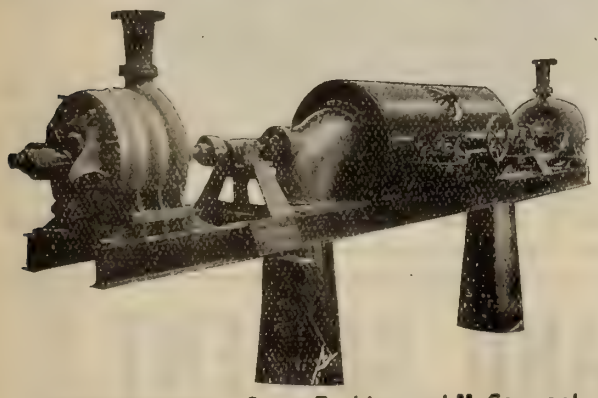

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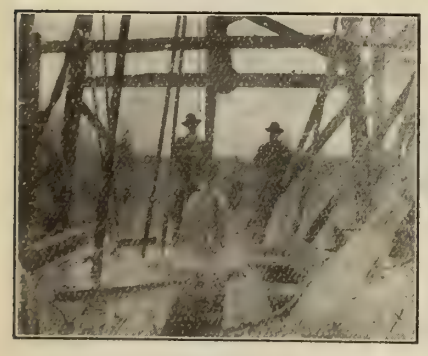

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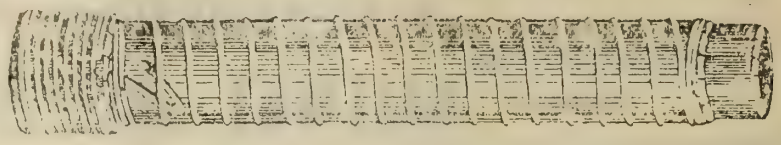

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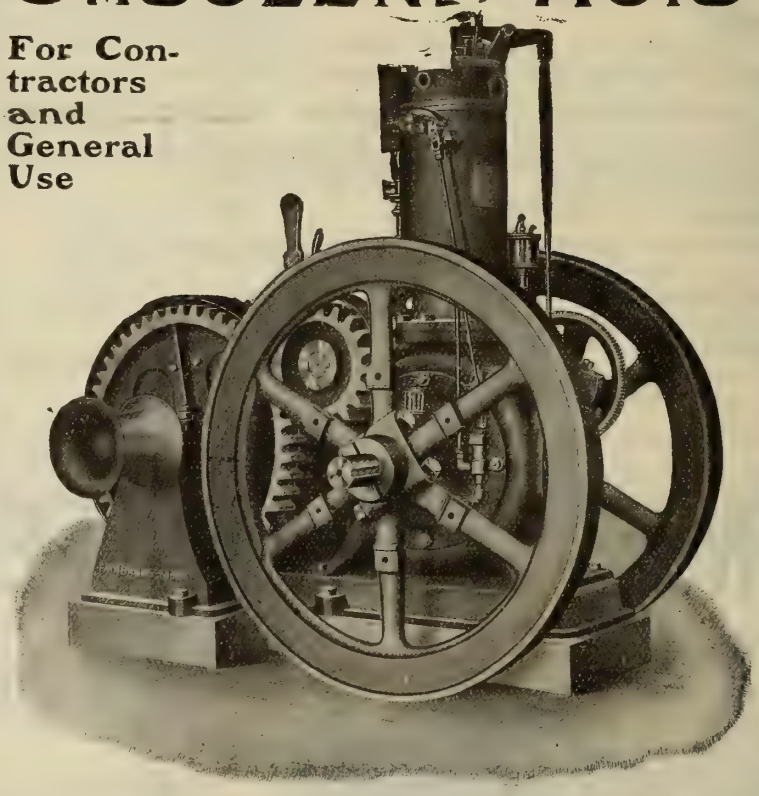

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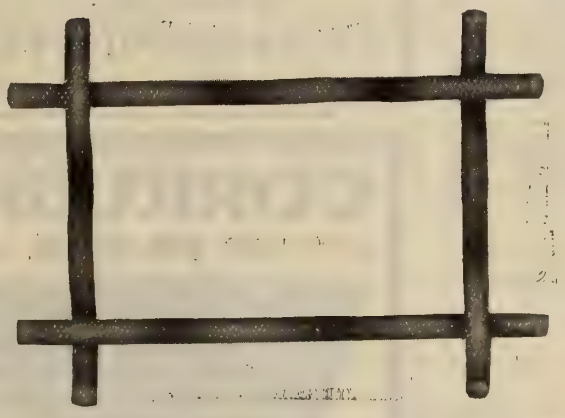

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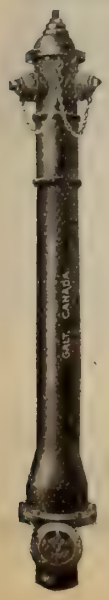

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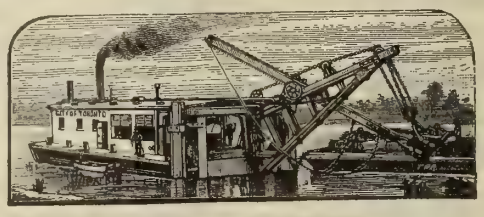

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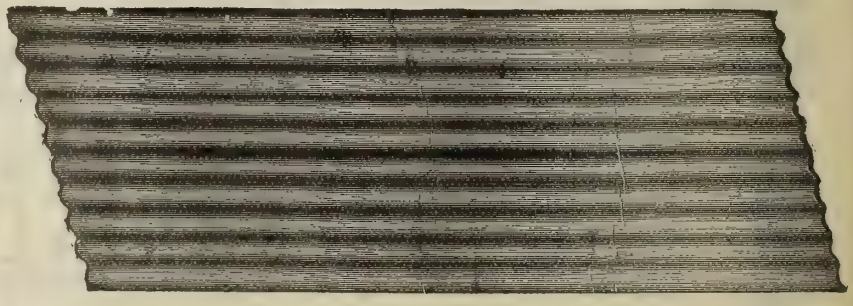

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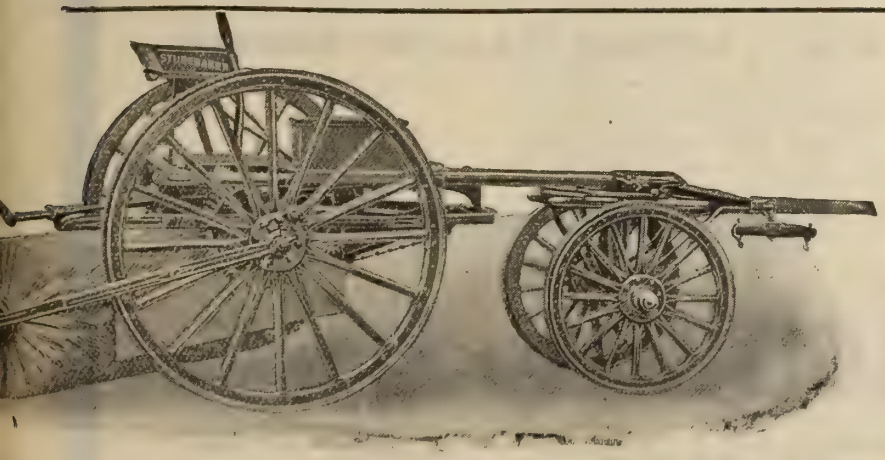

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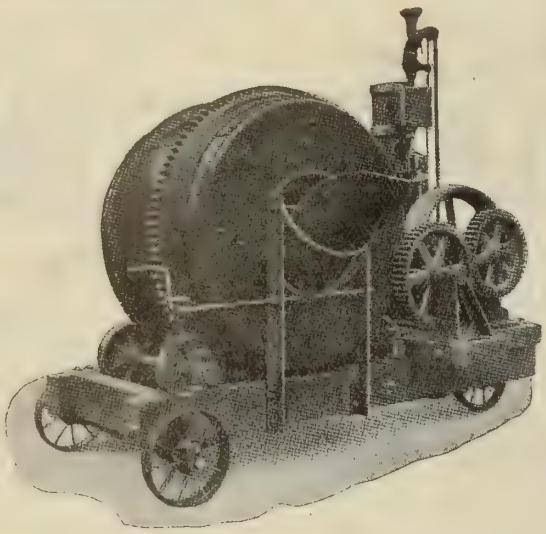

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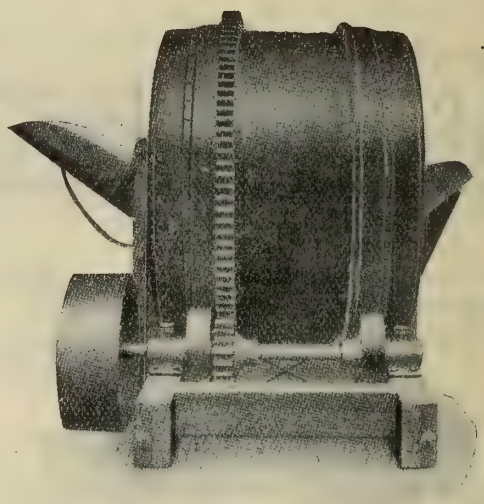

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CANADIAN

CONTRACT RECORD

A Weekly Journal of Engineering, Public Works, Tenders, Advance Information and Municipal Progress

This Paper Reaches Every Week the Town and City Clerks, Town and City Engineers, County Clerks and County Engineers, Leading Civil Engineers and Contractors throughout Canada, and Purchasers of Municipal Debentures.

VOL. 17. TORONTO, MONTREAL — NOVEMBER 21, 1906 — WINNIPEG, VANCOUVER No. 38

THE CANADIAN CONTRACT RECORD
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DRAUGHTSMAN

First class architectural man desires position as head draughtsman. For particulars apply to Box 100 CANADIAN CONTRACT RECORD, Board of Trade Building, Montreal.

TENDERS

Tenders will be received by the Fort Steele Brewing Company, Limited, up to the 18TH DAY OF DECEMBER, 1906, for all branches of work required in the erection of an up-to-date Fireproof Brewery, with a capacity of about 30,000 barrels per year. Building to the composed of brick and iron with cement foundation and stone trimmings.

The lowest or any tender not necessarily accepted. Plans and specifications can be seen on application at the company's office. All tenders must be accompanied by a marked cheque for 5 per cent. of the amount of the bid.

Dated at Fernie, British Columbia, this 27th day of October, 1906.

ALBERT MUTZ, President,
JOHN B. SMITH, Secy.-Treas.

TOWN OF PICTON

$15,000.00 High School Debenures

FOR SALE BY TENDER

Sealed tenders, addressed to Mayor, G. M. Farrington, and marked

"Tenders for High School Debentures,"

will be received up to SATURDAY, DECEMBER 1ST, 1906, for the purchase of $15,000 00 High School Debentures of the Town of Picton.

Full particulars furnished on application to

R. A. NORMAN, Town Clerk,
Town of Picton, Ont.

N. B.—The highest or any tender not necessarily accepted.

DRAUGHTSMAN WANTED—FIRST-CLASS

Draughtsman for outside also inside work man capable of taking charge. Apply stating experience and salary expected to Box 101, CONTRACT RECORD, Room B 34 Board of Trade Building, Montreal.

TOWN OF LISTOWEL

TENDERS FOR

REINFORCED CONCRETE ARCH BRIDGES

Separate or bulk tenders, addressed to the undersigned and marked "Tender", will be received until 7 o'clock p. m. on TUESDAY, NOVEMBER 27TH, 1906, for the construction of Reinforced Concrete Arch Bridges on Main, Wallace and Elma streets, in the Town of Listowel. The aggregate length will be about 310 feet of Conduit, 36 feet span.

Plans and specifications can be seen and all information obtained at the office of W. E. Binning, Architect, Listowel.

The lowest or any tender not necessarily accepted.

A. ST. GEO. HAWKINS,
Chairman Board of Works.

Listowel, November 10th, 1906.

TENDERS

For Roofing Work at the St. Lawrence Market, Toronto.

Tenders will be received by registered post only, addressed to the undersigned, up to noon on TUESDAY, DECEMBER 4TH, 1906, for the galvanized iron work and other work required to be done on the re-covering of the roof of what is known as the South Building, St. Lawrence Market, according to specifications, which may be seen, and forms of tender and all information obtained, at the office of the City Architect City Hall, Toronto.

Envelopes containing tenders must be plainly marked on the outside as to contents. The usual conditions relating to tendering, as prescribed by city by-law, must be strictly complied with, or tenders may not be entertained. The lowest or any tender not necessarily accepted.

EMERSON COATSWORTH, (Mayor).
Chairman Board of Control.

City Hall, November 16th, 1906.

In keeping with their policy of expansion, the Canada Paint Company, in addition to their factories in Montreal, Toronto, Winnipeg and St. Malo, have acquired by purchase the lead and putty mills of the Ontario Lead & Wire Company of Toronto. The latter concern will in future devote their attention to their other specialties.

EXPERIENCED ARCHITECTURAL DRAUGHTSMAN.

wanted at once, one who is a good designer and colourist preferred. Box 89 CONTRACT RECORD, Toronto.

CONTRACTS OPEN.

DORCHESTER, N. B.—An electric light plant will be installed here.

ROSTHERN, SASK.—A hospital is to be erected here to cost $25,000.

ELGIN, MAN.—It is reported that a drainage system will be installed here.

FERGUS, ONT.—A drain is to be constructed in West Luther, cost $10,000.

PORTAGE LA PRAIRIE, MAN.—The Masons will erect a large hall here.

CALGARY, ALTA.—Steps are being taken to enlarge the electric light plant here.

BRANDON, MAN. — The School Board will erect buildings to cost $80,000.

COLDWATER, ONT.—It is reported that a waterworks system will be installed here.

WIARTON, ONT.—Siemon Bros. propose to build a new flooring factory here.

TABER, ALTA.—Work will be commenced at once on the new meeting house here.

PORT CREDIT, ONT.—The Port Credit Brick Co. will construct a new dock here.

RICHMOND, QUE.— Repairs will shortly be made to the Town Hall, to cost $3,600.

CHILLIWACK, B. C.—A system of fire alarm signal boxes will be installed in this town.

PORT HOPE, ONT.—A new church will be erected here in place of the Mill street church.

RAYMOND, ALTA.—It is probable that the town will have an electric light plant installed.

GLACE BAY, N.S.—It is reported that a hotel will be erected here, at a cost of $25,000.

FREDERICTON, N.B.—Plans are being prepared for a new Normal school to be erected here.

GOLDEN, B. C. — The Columbia River Lumber Company will erect a large saw mill here.

WETASKIWIN, ALTA.—Plans will be submitted to the Medical Health Officer for the proposed hospital.

MERRITON, ONT.—A bridge will be erected here by the Niagara, St. Catharines & Toronto Railway.

BILLING'S BRIDGE, ONT.—The officials of the Methodist church are con-

templating the erection of a new church here.

PEMBROKE, ONT. — Debentures will be issued for the sum of $47,000 for the extension of the intake pipe.

WALKERTON, ONT.—The Town Council are considering the advisability of installing a waterworks system.

HAMILTON, ONT.—A by-law will be introduced to raise $120,000 for the carrying out of the east end sewerage scheme.

SUDBURY, ONT.—The Board of Railway Commissioners have approved of the location for the new C. P. R. station here.

PILOT MOUND, MAN.—R. A. McKellar intends erecting a building on the site of his old structure, which was recently burned.

GANANOQUE, ONT.—The Ontario Wheel Company have increased their capital and will erect additions to their present premises.

UXBRIDGE, ONT.—The Fire and Water Committee have been instructed to prepare a by-law for domestic water and fire protection.

ARCOLA, SASK. — The Town Secretary will shortly ask for tenders for pumping engines recommended by the town engineer.

BLYTH, ONT. — A. Elder, Town Clerk, will receive bids up to November 29th for the purchase of $10,000 4½ per cent. debentures.

PICTOU, N. S.—The Nova Scotia Telephone Company have purchased a site on which they intend to erect a stone and brick building.

BRIDGEBURG, ONT.—The plans for the extension to the sewerage system here are being considered by the Provincial Board of Health.

ROTHWELL, MAN. — Proposed changes in the waterworks system here will cost $10,000 and debentures for this amount will be issued.

BEAMSVILLE, ONT.—H.V. Robins, Town Clerk, will receive tenders up to December 1st, for purchase of $12,000 5 per cent. debentures.

ESTEVAN, SASK.—Willis Chipman, C. E., Toronto, will report on the feasability of establishing a waterworks and drainage system here.

SELKIRK, MAN.—A site for the new hospital has been purchased on Eveline street south and building operations will be commenced shortly.

LINDSAY, ONT.—A by-law will be submitted to the ratepayers for permission to issue debentures for $20,000 to install a filtration system here.

ST. OCTAVE, QUE. — Ouellet & Levesque, architects, Quebec, are calling for tenders up to November 22nd for erection of a stone R. C. church here.

WOLFVILLE, N. S. — The Town Council will seek permission from the provincial government to borrow $20,000 to install an electric light system.

THOROLD, ONT. — The Town Council have made application to the Provincial Board of Health for approval of their plans for a waterworks system. —A by-law will be submitted to the ratepayers to authorize the raising of $80,000 by debentures for carrying out the work.

WATERLOO, ONT.—The Council have made application to the Provincial Board of Health for approval of their plans for extension of sewerage system.

DUNNVILLE, ONT.—The Provincial Board of Health are considering the application made by the Town Council for the approval of plans for a sewerage system.

COLLINGWOOD, ONT. — A new fire hall will be erected here to cost $18,000.—The Board of Education have asked for $18,000 for the erection of a school.

ST. JOHN, N. B. — Tenders will be received up to November 20th for the erection of car stable for the St. John Railway Company. F. Neil Brodie architect.

HUNTSVILLE, ONT.—The Town Council have made application to the Provincial Board of Health for approval of their plans to continue the trunk sewer.

SARNIA, ONT.—The Grand Trunk Railway have purchased a site on Confederation street, which they intend to use for an enlargement of the tunnel yards.

DUNDAS, ONT.—The Jones Bros. Company, of Toronto, have purchased the premises of the Hardware Fittings & Door Co., and intend to install new machinery.

LISTOWEL, ONT.—Tenders will be received up to November 27th for the construction of three reinforced arch bridges. A. St. George Hawkins, Chairman of Works.

VICTORIA, B.C.—A. E. Ormond has purchased the Northern Bank building and intends to remodel same.—It is probable that the Y.M.C.A. will erect a new building here.

MOOSE JAW, ALTA. — George Perry is the head of a joint stock company which will erect a large hotel here. Jones & Bunyard, architects, have prepared the plans.

STRATHCONA, ALTA.—It is probable that the City authorities will enter into an agreement with the City of Edmonton to extend their telephone system to this city.

SOUTHAMPTON, ONT.—A meeting of the municipal representatives was held here recently to consider the question of utilizing the Saugeen river for the transmission of power.

SASKATOON, SASK, — The City Council have decided to issue debentures to the amount of $75,000 for local improvements.—A hospital will be erected here to cost $25,000.

FORT ERIE, ONT.—The Board of Railway Commissioners have approved of the location of the Niagara, St. Catharines and Toronto Railway line from this place to Lundy's Lane.

ARTHABASCA, QUE.—The Eastern Townships Railway Company will seek incorporation at the next session of the Dominion Parliament to construct a railway in the county of Nicolet.

OAKVILLE, ONT. — The Town Council have made application to the Provincial Board of Health to approve of their plans for the installation of a sewerage and waterworks system.

MAGOG, QUE.—The Town Council in conjunction with a private corporation, will install a waterworks system and tenders will shortly be taken for the erection of an electric pumping station.

BELLEVILLE, ONT.—Tenders will be received by C. N. Sutman (Mayor) up to the 26th inst., for all trades required for the remodelling of the Merchants' Bank building for a Public Library.

WELLAND, ONT.—The Niagara, St. Catharines and Toronto Railway Company are seeking permission from the Council to construct a branch line from their main road into the town.

BERLIN, ONT.—A new hotel will be erected here to cost $200,000. F. S. Baker, architect, Toronto, has prepared the plans.—A new telephone exchange will be erected here in the near future.

MORRIS, MAN. — The Board of Trade have recommended the erection of a courthouse and other public buildings here, and a delegation will wait on the Government in reference to the matter.

WEYBURN, SASK.—The Canadian Bank of Commerce will erect a building here. — The Town Engineer has recommended the purchase of a drill with which to secure water supply for the town.

INGERSOLL, ONT, — The John Morrow Machine Screw Company, have purchased the business of the Standard Bolt & Screw Company, Toronto, and will make additions to their present building.

BROCKVILLE, ONT.—Buell & Botsford will apply to the Dominion Parliament on behalf of the Brockville, Westport & North Western Railway Co. for an extension of time for the construction of their road.

NELSON, B. C.—The Great West Railway Co. will apply to the Dominion Parliament, through their solicitors, Gallaher & Hannington, for permission to extend and alter several of their routes in British Columbia.

MONCTON, N. B.—Tenders will be received up to December 10th for the erection of locomotive shops here for the Intercolonial Railway. L. K. Jones, Secretary Department of Railways and Canals, Ottawa, Ont.

CARLETON PLACE, ONT.—It is probable that a waterworks system will be installed here in the near future.—A by-law will be submitted to the ratepayers for authority to issue debentures for the sum of $1,600.

STRATFORD, ONT.—The North Midland Electric Railway will enlarge their power house at cost of $100,000.—The City Council will submit a by-law to the ratepayers to raise $5,000 to install additional plant at the waterworks.

FORT WILLIAM, ONT. — The advisability of building a bridge across the Kaministiqua river to island No. 2 is being considered by the Board of Trade and members of the proposed Fort William Terminal Railway Company.

LETHBRIDGE, ALTA. —The McLaughlin Manufacturing Company of Toronto will in all probability establish their plant here.—The Massey Harris Company are considering the advisability of erecting a warehouse here.

GUELPH, ONT, — The Guelph Carpet Mills, Limited, have purchased the factory of the old Petrie-Taylor Company and intend making additions to same.—The Victoria Biscuit Company, will erect a new factory, cost $20,000.

WOODSTOCK, ONT. — The City Engineer has prepared plans for extension of sewerage system, estimated to cost $4,000.—A site has been purchased on which a Carnegie library will be built.—The Y.M.C.A. will erect a new building here.

NIAGARA FALLS, ONT. — The Canadian Art Iron Works intend locating here. They will erect buildings which will cost $15,000.—The Carriage Mountain Company are asking the city for a loan of $10,000 for erection of new buildings and installing new plant.

MORRISBURG, ONT.—The Town Council are making application for the approval of a by-law to raise money with which to extend their water works and electric light systems. — The Molson's Bank have purchased a lot adjoining the Bradfield block, and intend erecting a building thereon.

PETERBORO, ONT. — The City Council have refused to grant a franchise to the Dominion District Steam Heating Company, as the intention is to install a municipal plant.—The City Council will ask the ratepayers to authorize the ex-

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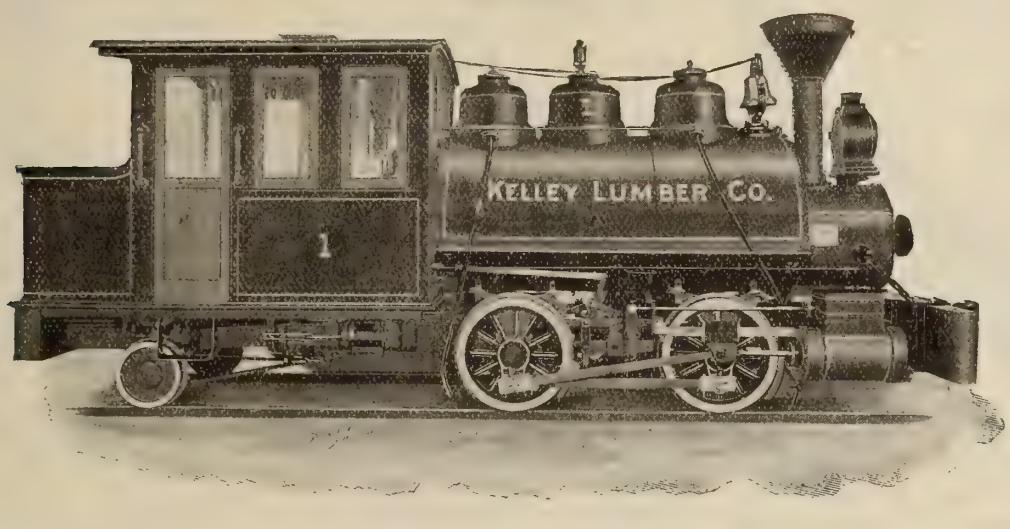

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MONTREAL

penditure of $38,000 for a new steel bridge across the river at Smith street, $23,000 to assist in the erection of the Collegiate Institute, also to issue debentures for $8,000 to divert the course of the Ashburnham creek.

PRINCE ALBERT, SASK.—The City Council will have a report made as to the feasibility of developing power in the Shell or North Saskatchewan rivers. —The City Council refused a franchise to W. S. Weeks for a street railway.—The School Board have decided to erect a High school here.

BELLEVILLE, ONT.—The Lehigh Portland Cement Company, with head office at Allentown, Pa., are receiving bids on all kinds of material, such as iron buildings, rotary kilns, rolls, tube mills, boilers, engines, stacks, dryers, etc. Canadian manufacturers should make inquiries at the Allentown office.

ST. THOMAS, ONT. — The City Engineer has estimated the cost of piping from the gas works to the Collegiate Institute at $6,000.—The Public Library Board are considering the advisability of installing an acetylene gas plant.—N. R. Darrach, architect, is preparing plans for a new laundry building for the Amasa Wood Hospital.

LACOMBE, ALTA.—Tenders will be called for shortly for excavating for the erection of a new school building.—A large brick block will be erected on Barnett avenue by A Urquhart & Co. Ltd.—A three-story hotel will be erected here by A. T. Inskip.—J. W. Lundy is having plans prepared for three-story building.

LONDON, ONT. — It is reported that Brener Bros. will erect a hotel here, cost $250,000.—McGaw & Winnett will add a story to the Tecumseh House, for which plans are now being prepared.—Building permits have been issued to C. A. Pratt, for two-story brick dwellings on the corner of George and John streets, and to W. E. Cotton for a story and a half brick veneer dwelling on Riverview avenue.

CORNWALL, ONT.—At a meeting of the shareholders of the Modern Bedstead Company, it was decided not to proceed with the erection of their new building until spring. Albert Fairwell, Secretary-Treasurer, Sherbrooke, Que.—Debentures will be issued for $4,000 to pay balance due on enlargement of the High School.—It is probable that the Town will purchase a stone crusher.

TORONTO JUNCTION, ONT.—An estimate of the brick paving of Dundas street places the cost at $56,400.—The following building permits have been issued: Canada Cycle & Motor Co., addition to factory, $4,000; Dr. Chas. Gilmore, two brick dwellings, corner of Keele and Annette streets, cost $7,000; John Marr, three brick dwellings on Keele street, $9,000; James Penrice, pair semi-detached houses on Laughton avenue, $6,000.

HALIFAX, N. S.—Herben & Gates, architects, have prepared plans for the following: New head office building in this city for the Nova Scotia Telephone Co.; for a building at North Sydney, C. B., for the Eastern Telephone Co.; six cottages at Woodside, N. S., for the Acadia Sugar Refining Co; house for T. B. Spencer, and business premises for Colin McNab & Co. at Dartmouth, N. S.; house for H. W. Sangster at Windsor, N. S., and house for Rev. Walsh at Chester N. S.

EDMONTON, ALTA.—A large hotel is about to be erected here, cost $100,000.—Building permits have been issued to G. Cass, dwelling on Heiminek street, $2,000, and Reginald Smith, two-story building on Rice street, cost $3,500.—The Gorman-Clancy-Grimsly Co. will erect a warehouse on Fourth street to cost $6,000.—A residence will be built on Sixth street for Mrs. J. Henderson, to cost $5,000.—A residence is to be erected on Twelfth street for Mrs. Chenwick, to cost $8,000. H. A. Lagoon, architect, has prepared plans for the three structures mentioned above.—The date for receiving plans for the proposed City Hospital has been extended to December 15th.—A. O. Dwyer will erect a large plant to carry on a pork packing industry at estimated cost of $500,000.

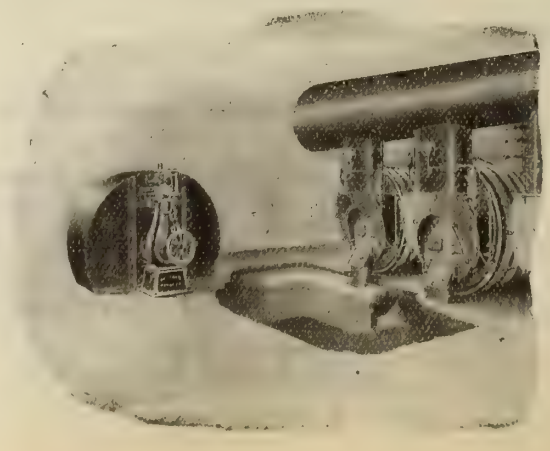
MONTREAL, QUE.—L. O. David, City Clerk, is this week taking tenders for the building of steel shelters at Bonsecours Market.—A proposition has been made to build a new wing at the jail.—The City Council have formally approved of plans submitted by the engineers of the Grand Trunk Railway to construct a tunnel under McGill street to connect the company's offices.—It is probable that a new Separate school will be erected here.—The new Hervey Institute which will be erected on Claremont avenue will be a four story brick structure.—R. M. Rodden has prepared plans for the erection of the Arena stables, cost $15,000.—The Quebec Oriental Railway Co. will seek incorporation at the next session of the Dominion Parliament, through its solicitors, McGibbon, Casgrain, Mitchell & Surveyer.

NEW WESTMINSTER, B. C.—A. L. Lavery has had plans prepared for several two-story houses on Carnarvon street.—J. McMartin is building a large residence on Fifth avenue and A. Wastell is having a dwelling erected on Dufferin street.—A large three-story residence is being built on Columbia street for Dr. Holmes.—A Swanson, proprietor of the Fraser Hotel, will add two new wings to his building.—Another story will be added to the Occidental Hotel, owned by J. Chappel.—A new wing will be added to the Queen's Avenue Methodist Church. — It is reported that a brick block will be erected on the corner Begbie and Columbia streets. Alderman Halse is the promoter of the scheme.—Plans have been prepared, for the Board of Hospital Commissioners, for a new hospital to cost $60,000.

VANCOUVER, B. C.—Building permits have been isssued as follows: Mr. Louis, two houses on Comox street, cost $6,000; E. G. McLennan, three house on Eighth avenue, cost $6,000, and J. S. Stevens, residence on Davie street, cost $5,000.—The Fire and Police Committee have made the following recommendations: The purchase of two fire engines to cost $13,000; the installation of thirty new fire alarm boxes and building of three new fire-halls.—Henry Birks & Sons, Limited, have purchased the business of G. E. Torey, and intend to enlarge both salesroom and factory.—A large mill will be erected on Graham island by Martin & Shannon, of this city.—The Westminster & Chilliwack Railway Co. will seek incorporation from the Dominion Government. They purpose constructing a road between New Westminster and Chilliwack. McPhillips, Tiffen & Laursen, solicitors.

OTTAWA, ONT.—The James Bay Railway Company have been authorized by the Board of Railway Commissioners to construct four bridges over the outlet to Lake Couchiching.—Building permits have been issued as follows: G.J. Bayson, brick dwelling, cost $8,000; P. J. Nolan, brick dwelling on Elm street, cost $5,500, St. Germain and Black, brick dwelling on Argyle street, cost $3,500.—Lewis & Smellie, solicitors, will apply to the Dominion Government for incorporation of the Alsek & Yukon Railway Co. to construct a road from a point in British Columbia northward.—The Ungava Railway Co. will make application at the next session of the Dominion Parliament for incorporation. They intend operating a road from Cambrian Lake to a point opposite Fort Chimo. Chrysler, Bethune & Larmonth, solicitors.—Andrew D. Thompson is making application to the Dominion Parliament on behalf of the Georgian Bay & Seaboard Railway Co. for an extension of time in which to construct their road.—The Crawford Bay & St. Mary's Railway Co. are also making application for authority to extend their lines into Manitoba. J.B.T. Caron is solicitor for the applicants.—Tenders will be called for shortly for the construction of the section of the G. T. P. railway between Superior Junction and La Tuque, Que.

WINNIPEG, MAN.—A new school house will be erected at St. James, Man., at a cost of $6,000.—Asphalt pavements will be constructed as follows: Isabel street, from Logan avenue to Henry avenue, cost $2,219; Higgins avenue from Maine street to Maple street, cost $14,823; Selkirk avenue from Andrew street to Sinclair street, cost $42,758; Sargeant avenue, from Maryland street to Arlington street, cost $30,643.40; Notre Dame avenue, from Maryland street westward, cost $191,780; Corydon avenue, from Pembina street to Stafford street, cost $64,596.40; macadam road, from Wellington Crescent to Harrow street, cost $26,927; a cedar block pavement will be laid on Sargeant avenue from Arlington street to Erin street, cost $16,600.—A sewer will be laid in Jasper street from Stadacona street to the end, cost $10,150. — Three suburban fire stations will be erected here and one of the city stations will be extensively remodelled. Debentures for $75,000 will be issued to cover the cost of these works. —An Anglican cathedral will be erected here to cost $150,000.—The National Transcontinental Railway have selected a site at St. Boniface for their terminal.—Authorities are considering the erection of a bridge over the Red River to St. Boniface.—The Canadian Northern Railway have made application for a permit to build a round house at Fort Rouge.—A bridge is to be constructed over the C.



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P. R. tracks to cost in the neighborhood of $200,000.—The Dominion Government will be asked to incorporate the Manitoba Radial Railway Co., to build a railway from Winnipeg westward. Arthur Wagner is making the application.

TORONTO, ONT.—The Board of Control have decided not to purchase the $60,000 hydraulic dredge recommended by the City Engineer this year, but an appropriation will likely be included in next year's estimates.—F. H. Herbert, architect, has prepared plans for the new Public Library building at Belleville, Ont., for which tenders are now being taken.—F. S. Baker, architect, has prepared plans for a large hotel to be erected at Berlin, Ont.—The City Engineer has recommended that an asphalt pavement be laid on Macdonnell avenue, at a cost of $15,112.—The plans for the trunk sewer have been approved of by the Provincial Board of Health.—A new steel and reinforced concrete grand-stand is to be erected in the Exhibition grounds, in place of the one recently burned. Geo. W. Gouinlock, architect, has prepared the plans.—The City Council have given notice of their intention to construct the following works: Asphalt pavement on Roncesvalles avenue, from Queen to Dundas street, cost $48,956; vitrified block pavement on Peter street, from Front to Wellington streets, cost $3,436; macadam roadway on Winchester street, from Sumach street to Danforth avenue, cost $22,939; brick sewer on Dupont street, from Christie street west, to cost $2,900; tile pipe sewer on Hampton avenue, from Sparkhall avenue to Hogarth avenue, cost $2,770.—Tenders will shortly be invited for piling across Princess street slip.—Plans for the proposed ambulance station will be submitted to the City Council next week.—The estimated cost of the

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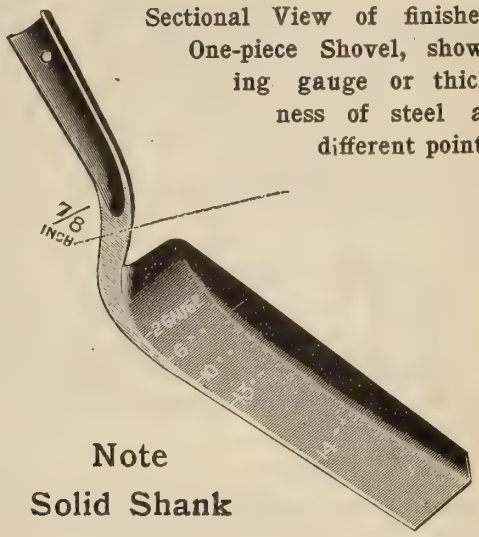

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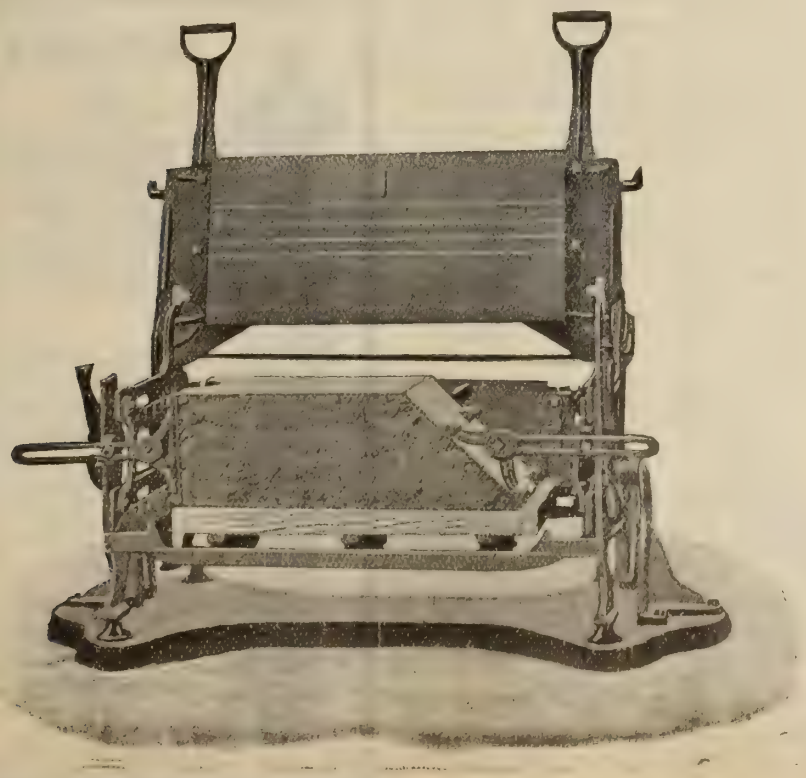

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Niagara Falls. - Can.

morgue to be erected on Lombard street is $30,000.—Tenders will be received by the Board of Control up to December 4th for roofing the St. Lawrence market, Plans at city architect's office. — The Nipissing Central Railway Co. are seeking incorporation, through their solicitors, Denton, Dunn & Boultbee. They intend constructing several lines in Eastern Ontario.—The following building permits have been issued: Wm. Ingleby, two story and attic brick dwelling on Givens street, cost $2,500; G. E. & S. J. Case, pair of semi-detached two-story brick dwellings on Margueretta street, cost $4,000; W. H. Thompson, pair of semi-detached brick store and dwellings on west side of Yonge street, near Roxborough avenue, cost $4,000; Kidney & McElvie, two and half story brick dwelling on east side of Walmer road, cost $5,000; B. H. Moorehouse, two story and attic brick dwelling on Langley avenue, cost $4,000; J. Polesky and J Hutchin, two detached brick veneer and rough cast dwellings, cost $3,000; Ross Gooderham, two story brick stable, corner Lowther avenue and St. George street, cost $4,000; J. S. & I. J. Sharp, pair two story brick stores and dwellings, College street, near Clinton, cost $6,500.—Chadwick & Beckett, architects, will receive tenders up to 23rd inst. for mason work, carpenter work and galvanized iron work for a house on Palmerston avenue.—Tenders are wanted by S. B. Coon, architect, 58 Roxborough street west, for brick and stone work on two detached houses.—Mr. R. J. Score has purchased land on Kendall Ave. on which to build a residence.

FIRES.

Mormon Church at Taber, Alta., loss $3,000.—H. Clark's tailor store and other buildings at Waterdown, Ont., loss $2,000.—Muirhead and Black's elevator at Fort William, Ont, totally destroyed, loss $20,000. — Factory of Canadian Rubber Co., Limited, Montreal, loss $10,000. — Exhibition grand-stand at Halifax, N. S., loss $5,000.—Strathcona Hotel, Strathcona, Alta., loss $5,000.—Flour mill of the Harding Co., Harding, Man., loss $25,000. — Saxon's Block, Hotel Pearsall and other buildings, Port Rawan, Ont. loss $80,000.

AWARDED.

CAMROSE, ALTA. — Building of a water tank and firehall; Bonnyman & Scott, $1,350.

ST. LOUIS QUE. — Fire engine: Canadian Steam Fire Engine Company, London, Ont., successful tenderers.

WALKERVILLE, ONT.—Brick factory for Dominion Dash Co.: Victor Williamson, successful tenderer.

WELLAND, ONT.—Supply of electric light: Stark Electric Systems, Limited, Toronto, successful tenderers.

ERSKINE, ALTA. —$1.800 Erskine school debentures, awarded to Nay, Anderson & Co., Regina, Sask.

PRESCOTT, ONT. — Heating the Presbyterian church: James Smart Mfg. Co., Brockville, Ont., contractors.

MAIDSTONE, SASK.—$1,500 Maidstone school district debentures, awarded to Nay, Anderson & Co., Regina Sask.

WINNIPEG, MAN.—Dobson & Jackson have been awarded the contract for sewer construction in St. John's avenue, $858.50; Anderson avenue, $3,991.60; Dominion street, $1,895.40. Two 250 horse power water tube boilers, Babcock & Wilcox, Montreal, Que., successful tenderers, $14,750.

The Osaka Cement Company, a Japanese concern, has already supplied 400,000 barrels to San Francisco since the earthquake.

MANUFACTURE OF CEMENT IN JAPAN.

Japanese cement, as an article for export, has not yet, says the Japan Weekly Chronicle, reached the status of the principal staple articles, its export being only half a million yen or thereabouts a year; but the Chugai Shogyo thinks the trade is on the eve of expansion, as the demand for Japanese cement will increase with the development of Korea, Manchuria, Russian territory, and other Eastern countries. Nine years ago its export only amounted to 16,000 yen in value, but in 1903 it had increased to 590,000 yen. The war has put a temporary check to the growth of the industry, but with the restoration of peace a revival has taken place. Not only is the demand for Japanese cement springing up in Korea and Manchuria, but large orders received from San Francisco brought about since the earthquake and conflagration have given a great impetus to the industry. All the stock in the market has been cleared, and the cement companies are now busily engaged in manufacturing to meet requirements. The amount of cement exported during the last ten years was as follows:—

	Quantity Kin.	Value Yen.
1896	2,322,644	25,372
1897	938,188	16,257
1898	2,108,686	36,955
1899	4,648,722	62,632
1900	15,088,419	194,469
1901	17,815,512	245,081
1902	22,840,563	308,349
1903	41,749,234	596,204
1904	39,085,471	548,497
1905	31,614,437	395,392

Up to the end of May this year the value of cement exported had reached over 423,000 yen, while the figures for the corresponding period of the two preceding years were 198,000 yen and 217,000 yen respectively. That is to say, the quantity exported during the first five months of this year exceeded that for the whole of last year. The principal countries to which cement was exported during the whole of 1905 and the first four months of this year are as under:—

	1905. Kin.	1906. Kin.
Korea	13,455,653	4,823,382
America	298,140	7,428,338
China	4,790,812	2,291,925
Manchuria	–	1,731,859
Dutch India	3,326	487,500
Russia	500	302,405
Philippines	4,133,287	300,080
Hong Kong	988,440	90,000
Straits	60,000	56,000
Australia	28,728	28,728
Canada	7,755,711	—
Others	99,780	66,173

The remarkable increase in export to America that has taken place this year is doubtless owing to the unlooked for event at San Francisco, while as to the gradual increase of export to Manchuria, Korea, and Asiatic Russia there seems to be little doubt. Next, it will be interesting to review the amount of capital invested by the various cement companies and their annual producing capacity.

WATERWORKS MATERIALS.

The materials used for water service pipes in Massachusetts are given in detail in the report of the Massachusetts State Board of Health for 1904-05, which has just been issued. The inquiry was prompted, it seems, by a number of cases of lead poisoning through the use of lead service pipes in different cities, which have occurred in different parts of the state. A summary given in the report named shows that in 3 cities in Massachusetts all the service pipes are of lead, and in 23 other cities and towns they are chiefly of that material. In addition, lead or lead-lined pipes are used to a considerable extent in about adozen other places. In 83 cities and towns no lead whatever is used. Plain wrought-iron pipe is used in 12 cities and towns, while in 53 the services are chiefly of galvanized iron and in 49 they are principally of cement-wrought iron. In Fairhaven tin-lined services are in general use, and they are also largely used in Kingston, Milford and Hopedale, where lead poisoning has occurred due to the the use of lead service pipes; tin-lined services are also used to some extent elsewhere. For new services and for renewals, lead or lead-lined pipe is now used almost exclusively in 28 cities and towns cement-lined pipe in 34, and galvanized pipe in 65 cities and towns. As would be expected, plain wrought-iron pipe has invariably given rise to "more or less trouble" from rusting and "considerable trouble from this cause has been experienced in 44 places using galvanized-iron pipe" As many as 8 places report that cement-lined pipes have also given trouble from rusting.

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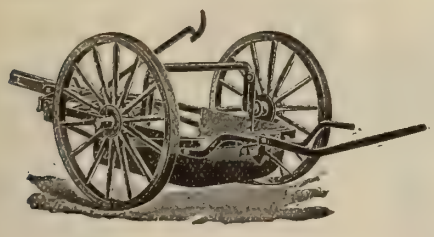

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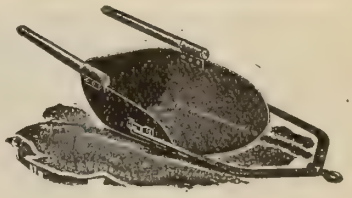

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R. & W. Kerr, Limited, Montreal, Que., incorporated, to manufacture hardware, furniture, sporting goods, etc., capital $90,000. Incorporators, R. Kerr, E. F. Kerr, J. L. Kerr and others, all of Montreal.

O. Martineau & Fils, Limited, Montreal, Que., incorporated, to operate quarries, capital $100,000. Incorporators, O. Martineau, J. O. Martineau, A. Martineau, and others, all of Montreal.

Montreal Sand and Gravel Company, Limited, Montreal, Que., incorporated, capital $100,000. Incorporators, W. Mann, C. Percy, L. M. Terrill, M. B. Turner and W. R. Staveley, all of Montreal.

French Pasteurized Fluid Beef Company, Limited, Montreal, Que., incorporated, capital $49,875. Incorporators, L. Perron, N. U. Lacasse, A. Dudemaine, N. H. Asselin, E. Lacasse, J. E. Costin and S. Jeanotte, all of Montreal.

Upper Ontario Steam Boat Company, Limited, New Liskeard, Ont., incorporated, capital $99,000. Incorporators, F. S. Brickenden, F. W. Hendry, M. R. Jennings, G. C. Banks and F. L. Smiley, all of New Liskeard.

Leitch Collieries, Limited, Ottawa, Ont., incorporated, capital $1,000,000. Incorporators, D. H. MacMahon, A. A. Baylie, E. Seybold and others, all of Ottawa.

Jas. S. Dunn Company, Limited, Montreal, Que., incorporated, to manufacture office supplies, capital $20,000. Incorporators, J.S. Dunn, J. I. Brady, E. Seager and others, all of Montreal.

New York Silk Waist Manufacturing Company, Limited, Montreal, Que., incorporated, capital $20,000. Incorporators, J. S. Leo, Emma Gohen and I. S. Goldstein, all of Westmount, Que., and H.S. Arnold and Lillian Meighen, both of Montreal.

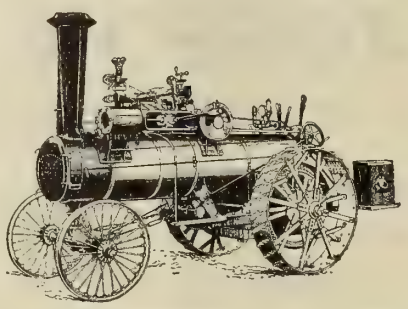
Gravel & Duhamel, Limited, Montreal, Que., incorporated, capital $99,000, to manufacture hardware, etc. Incorporators, P. Gravel, J. G. Duhamel, J.A. Barrette, all of Montreal, and others.

E. C. Joyal, Limited, Montreal, Que., incorporated, capital $20,000, to deal in chemist's and druggist's supplies. Incorporators, Lena G. Marsh and H.E. Joyal, of St. Louis, Que., and others.

NOTES.

Building permits were issued in New Westminster, B.C., in October to the value of $292,845, being an increase of nearly $80,000 over the same month last year.

Despite the general prosperity in England the Portland cement trade is in a gloomy state. Sales are larger this year than last and the demand from the United States is particularly active, but prices are persistently low, and profits are only possible by carefully trimming all running expenses. The British trade is mainly in the hands of a combine, the Associated Portland Cement Manufacturers, which is staggering under a heavy load of mortgage and debenture stock, due to buying at high prices out-of-date plants that had to be modernized at heavy expense.



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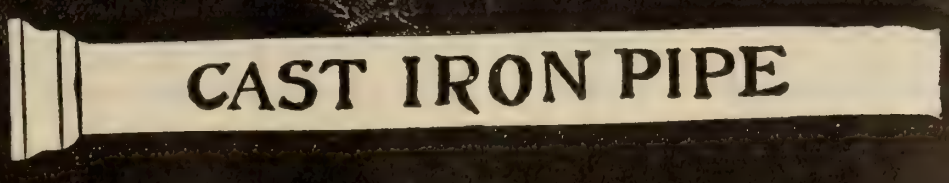

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CONCRETE TILE CULVERTS IN ONTARIO

The use of concrete tile for small highway culverts in Ontario is steadily increasing, and where they have been properly made there is rarely any complaint against them, acording to a special report of Mr. A. W. Campbell, Commisssioner of Highways of the Province. In some municipalities they have been in use fifteen to eighteen years without renewal, and still appear to be as good as when first laid.

Among the chief points to observe in making them, Mr. Campbell states, are that they shall be made of good materials, the concrete carefully mixed, and that they are not too small. The size is controlled to some extent by the depth of the side drains below the graded roadway, as it is neccessary that there should be a foot of earth over the pipe. It is not desirable to use pipe less than 18 in. in diameter if the situation will permit; but two smaller lines of pipe may, as an alternative, be laid side by side. The objection to small pipe is that they are liable to be stopped up. In striving to keep down expense, there is a tendency to use concrete tile where a large waterway is needed. This is the reverse of economy, for by contracting the water area, drainage is impeded, the road-bed is injured, and washouts frequently result. Concrete tile are excellent in their place, where they give sufficient waterway, but provisions should always be made for the maximum rushes of water, not the average flow. Where concrete tile are too small for this, concrete arches, or square top culverts should be considered.

The construction and repair of wooden culverts has become, in numerous townships, a serious drain upon the yearly appropriation available for road purposes. In some cases Mr. Campbell finds that as much as half or two-thirds of the grant from the general funds is absorbed in this way, a matter of from $1,000 to $2,000 annually. The number of these culverts on country roads varies greatly. Ordinarily half a dozen are needed for each mile of road if proper drainage is provided. By replacing these, as required, with permanent concrete culverts, this annual expenditure can be almost wholly wiped out.

Making concrete tile for culverts is not a difficult matter, and can be undertaken by the municipalities themselves, although in numerous cases they are now manufactured as a private enterprice. Just such a number of pipe as are actually required for the season's work need be manufactured; the implements required are inexpensive, and the pipe may be made by the municipality for actual cost, which, after a little experience, can be reduced to a very small amount. The outfit required consists of two cylinders; the larger hinged, the smaller a spring cylinder; bottom and top rings; and a tramping iron. The one cylinder forming a core, sets inside the other, leaving a space between the two equal to the thickness of the finished concrete pipe. These can be procured from the manufacturers of roadmaking machinery. By a "spring cylinder" is meant one formed by rolling a steel plate into a tube without sealing the joint. With the smaller of these cylinders the edges overlap or coil slightly, but are so manufactured that they may be forced back and set into a perfect cylinder. In the case of the larger cylinder, the shell is cut into two parts with hinges on one edge, and latches on the other. Bottom and top rings shape the bell and spigot ends of the pipe.

The two cylinders, with joints flush, are set on end, the one centrally inside the other and on the bottom ring, which in turn rests on a firm board bottom. The concrete, made of first-class cement, and clean, screened gravel, is then tamped firmly into the space or mold between the two cylinders. The tamping-iron used to press the concrete into place is so shaped as to fit closely to the cylinder.

The concrete is allowed to stand in the mold for a short time, when the cylinders are removed; the outer and larger cylinder by unfastening the clamps, and swinging the shell open on its hinges; the inner cyclinder by removing the fastenings, so as to allow the edges to again overlap, returning to the shape of a coil. The outer clyinder having thus been opened and the inner one made smaller, they can be readily taken away, and the concrete pipe is then left until thoroughly hardened.

The concrete adheres closely to the metal, and to overcome this it is necessary to keep the molds well oiled. This should be done after each tile is made, and when the molds are by this means kept perfectly clean, a smooth and uniform pipe of good appearance will be obtained. A good mixture for oiling the molds is composed of two parts of machine oil to one part of coal oil.

To secure a durable pipe it is necessary to exercise much care in mixing the concrete, and Mr. Campbell particularly advises the use of Portland cement. If gravel is used, it should first of all be clean. Any earthy material, clay, or vegetable mold will create a flaw in the pipe, which will lead to its early destruction, and durability is the quality most to be desired. The gravel should be of a size that will pass through a one-half inch screen, and should be of varying sized grain, in such proportion as to make a compact mixture. The gravel forms the greater part of the mass of concrete, and it is evident that the results will depend very largely on the quality of the gravel.

The materials should be mixed in the proportion of one part of Portland cement to two parts of gravel. They should first be turned over in a dry state until thoroughly intermixed and of uniform color. Water should then be added. This, like the gravel, should be clean, and there should be just enough to moisten the mass of concrete, making it of the consistency of a stiff mortar. An excess of water tends to injure concrete in various ways, and is especially to be avoided in the manufacture of tile, as the tamping cannot be properly performed when too much water is used. When the water has been added, the mixture should be made uniformly moist, by turning it over several times with a shovel. The concrete is then ready to be placed in the molds, in which it should be firmly and vigorously tamped.

Such a quantity of concrete should be mixed as can be put in the molds before the process of setting has commenced, and it is therefore of importance to know how long the brand of cement used can be worked before setting begins. A moderately slow-setting Portland cement is necessary for this work. Ordinarily it is best to mix enough to fill one mold at a time. Remnants of concrete which have commenced to set should be thrown away, in Mr. Campbell's opinion, and under no circumstances should they be worked up again and used, as, he believes, they are certain to cause a defective pipe. Defects which do not appear until after the tile have been placed in a culvert and covered with earth cause not merely the loss of the pipe, but a considerable outlay for labor is wasted as well. The concrete should be handled quickly. Two men are needed, one to shovel it into the molds, and the other to tamp it.

Until the concrete has hardened sufficiently the molds should not be disturbed. When the pipe has attained sufficient strength (which it should do in from five to seven hours, according to the temperature of the atmosphere, and the kind of cement used), it can be taken off the bottom rings. To enable the pipe to set satisfactorily they should be dampened every day for several days, if the weather is dry, and

(Continued on Page 14.)

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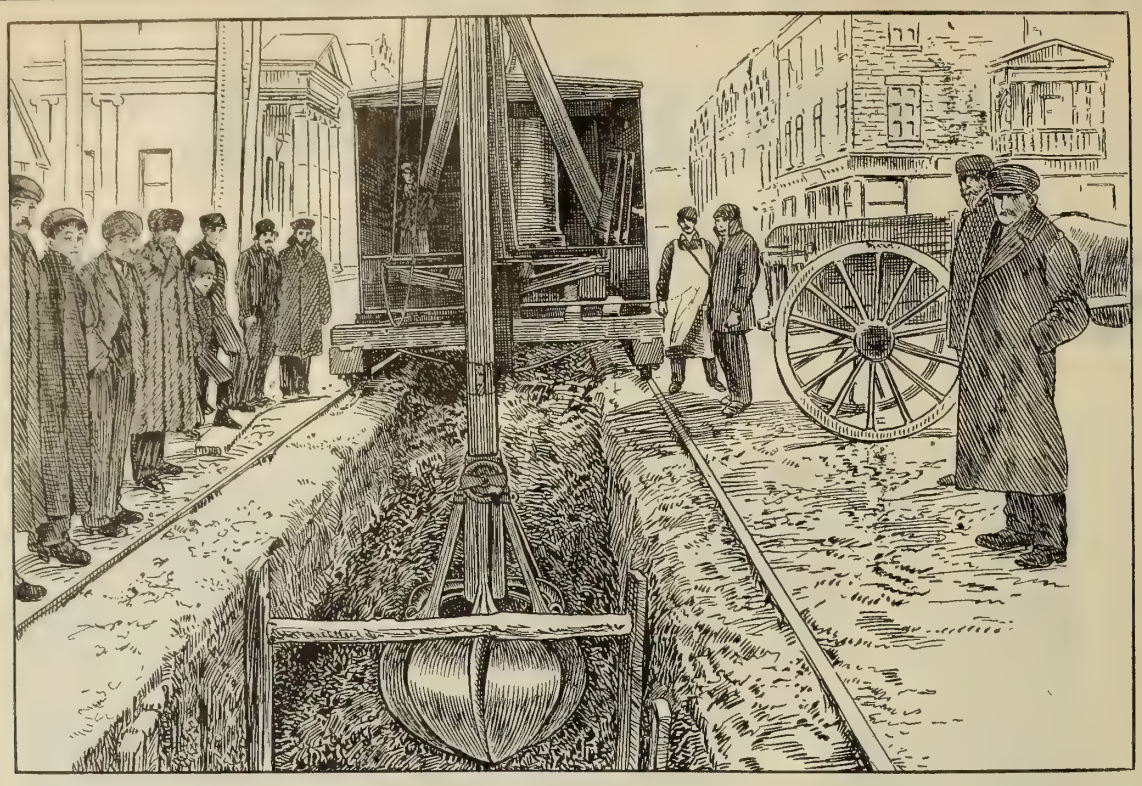

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CLASSIFIED INDEX OF ADVERTISERS

ACCIDENT INSURANCE
Page
Ontario Accident Insurance Co. 19

BLUE PRINTS
Electric Blue Print Co. 7

BLOWERS
Buffalo Forge Co. 4

BRIDGES (CONCRETE)
Steel Concrete Co. 15

BRIDGES (STEEL)
Canadian Bridge Co. 19
Canada Foundry Co. 23
Dominion Bridge Co. 15
Jenks & Dresser 16
Phoenix Bridge and Iron Works 15

CEMENT
Alsen Portland Cement Co. 9
Bremner, Alex 15
Currie & Co., W. & F. P. 20
DeSola, C. I 7
Gray & Bruce Portland Cement Co. 21
Hyde & Co., F 22
Hanover Portland Cement Co 19
Lakefield Portland Cement Co. 14
McNally & Co., W. 7
Morrison & Co., T. A. 20
National Portland Cement Co 18
Owen Sound Portland Cement Co. 8
Ontario Portland Cement Co. 16
Raven Lake Portland Cement Co. 20
Stinson-Reeb Builders' Supply Co. 17
Toronto Pottery Co 22
Thorn Cement Co. 14

CONCRETE MIXERS AND MACHINERY
Dartnell, E. F. 8
Hopkins & Co., F. H 24
Ideal Concrete Machinery Co 18
Mussen & Co., W. H. C 3
Morrison & Co., T. A 20
Toronto Pressed Steel Co 7
Vining Bros. Mfg. Co 5

CONTRACTORS' PLANT
Beatty & Sons, M. 22
Harris Co., J. W 12
Hopkins & Co., F. H. 24
Locomotive & Machine Co. 15
Mussen & Co., W. H. C. 3
Peat & Sons, James 14
Toronto Pressed Steel Co. 7

CONCRETE CONSTRUCTION
Ambursen Hydraulic Construction Co. 7
Loignon, A. & E. 7
Steel Concrete Co. 15

CONTRACTORS' EMPLOYMENT BUREAUS
Bryans & Co., E. E. 7
Zarossi, Banco 15

CORRUGATED IRON
Metallic Roofing Co. 5
Pedlar People 22

CRUSHERS (STONE AND ROCK)
Allis-Chalmers-Bullock 11
Beatty & Sons, M. 22
Dartnell, E. F. 8
Hopkins & Co., F. H. 24
Mussen & Co., W. H. C. 3
Morrison & Co., T. A. 20

DEBENTURES
Nay, Anderson & Co. 22
Stimson & Co., G. A. 21

DRILLING CONTRACTORS
Page
Harvey, J. 20
Peat & Sons, James 14

ENGINEERS AND CONTRACTORS
British Columbia General Contract Co. 23
Canadian White Co. 8

ENGINEERS (CIVIL)
Archibald, George H 15
Chipman, Willis 17
Connor, Clarke & Monds 17
Davidson, Shirley 21
Davis, Johnston 15
Fenson, C. J. 16
Fielding, John S. 7, 13, 17
Galt, John 7
Jackson, John H. 17
Lea & Coffin 17
Leofred, A. 21
McConnell, Brian D 13
McDougall & McRae 7
Parke, Roderick J. 17
Scott, Wm. Fry 21
Simpson, T. T. 21

ENGINEERS (MECHANICAL)
Farmer, John T 21
Galt, John 7

ENGINES
Cameron & Co., Hugh 16
Sawyer & Massey Co 6

ELECTRICAL APPARATUS AND SUPPLIES
Allis-Chalmers-Bullock 11
Drummond, McCall & Co 14
Northern Electric & Mfg. Co.

FIRE APPARATUS
Cameron & Co., Hugh 16
Meadows, George B., Toronto Wire, Iron & Brass Works Co. 9
McGregor & McIntyre 8
Seagrave, W. E., Walkerville, Ont. 16

HOISTING MACHINERY
Allis-Chalmers-Bullock 11
Beatty & Sons, M. 22
Hood & Sons, Wm 19
Hopkins & Co., F. H. 24
Mussen & Co., W. H. C 3

HYDRANTS
Canada Foundry Co. 22
Canadian Fairbanks Co. 20
Gartshore-Thompson Pipe & Foundry Co. 9
Kerr Engine Co. 8
Montreal Pipe Foundry Co. 9
McDougall Co., R. 21

LOCOMOTIVES AND RAILS
Gartshore, John J. 19
Locomotive & Machine Co. 15
Mussen & Co., W. H. C. 3
Sessenwein Bros 7

PILE DRIVING
Hood & Sons, Wm. 19
Russell, John E. 19

PAVING AND PAVING MATERIALS
Brunet, Joseph 17
Forest City Paving Co. 17
Nash Road 20
Ontario Asphalt Block Co. 17
Silica Barytic Stone Co. of Ontario 15
Warren Bituminous Paving Co. 7

PIPE (WOODEN)
Canadian Pipe Co. 9
Pacific Coast Pipe Co. 20

PIPE (CONCRETE)
Page
Dominion Concrete Co. 16

PUMPS AND PUMPING MACHINERY
Allis-Chalmers-Bullock 11
Canadian Buffalo Forge Co. 4
Canadian Fairbanks Co. 20
Canada Foundry Co. 23
Drummond, McCall & Co 14
Mussen & Co., W. H. C. 3
McDougall Caledonian Iron Works Co., John 19

PIPE (CAST IRON)
Canada Foundry Co. 23
Gartshore-Thomson Pipe and Foundry Co. 9
Gaudry & Co., L. H. 7
Montreal Pipe Foundry Co. 9

ROAD MACHINERY
Cameron & Co., Hugh 16
Climax Road Machine Co. 7
Heaman, George 23
Morrison & Co., T. A. 13
Sawyer & Massey Co. 8

ROPE
Allan, Whyte & Co. 21
Dominion Wire Rope Co. 24
Greening Wire Co., B. 21

SECURITY BONDS
United States Fidelity & Guaranty Co. 21

STEEL BARS (CORRUGATED)
Corrugated Steel Bar Co. of Canada 16

STRUCTURAL IRON AND STEEL
Canada Foundry Co. 23
Dominion Bridge Co. 15
Jenks & Dresser 16
Locomotive & Machine Co. 15
McGregor & McIntyre 16
Phoenix Bridge & Iron Works 15

STONE
Crushed Stone, Limited 16
Doolittle & Wilcox 21

SHOVELS (STEAM)
Allis-Chalmers-Bullock 11
Beatty & Sons, M. 22
Hopkins & Co., F. H. 24
Locomotive & Machine Co. 15

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should be protected from the direct rays of the sun in hot weather. They should not be used for some time after being made, but should be allowed to season for from four to six weeks.

The molds for manufacturing these tile may be obtained in various sizes, the more common being for tile ranging from 10 to 30 in. in diameter. The molds are such as will manufacture pipe 2½ ft. long. One set of bottom rings—those for forming the bell of the pipe—go with each set of molds, but it is advisable to have about three sets of bottom rings for each pair of cylinders, to permit the maximum number of pipe to be made in a day.

If the best results are to be obtained from the use of concrete tile culverts, the tile must be put in place with reasonable care, and Mr. Campbell's suggestions on this head read as follows: It is, in the first place, necessary that they shall be laid with a good fall on a regular grade to a free outlet, in such a way that water will not stand in them. Lay the tile with the spigot end down grade, and make the joints tight with cement mortar. If the joints are open, water will work along the outside of the culvert, and finally make a considerable channel, which will allow the culvert to get out of line and finally result in a cave-in. To prevent the water finding its way along the outside of the pipe, it is advisable to protect the ends with concrete, stone or brik head-walls.

Excavate a concave bed for the pipe, with depressions for the bell of the pipe to rest in, thus securing an even bearing, without which a heavy load passing over before the culvert has properly settled into place may burst the tile. Tile cannot be used in very shallow culverts, but must have a sufficient depth of earth over them to protect them from the direct pressure of heavy loads. The depth of covering necessarily increases with the size of the pipe. At least a foot of earth over the top is advisable in every case; but for culverts of 2 ft. in diameter or over, this should be increased at least 18 in. The earth should be well packed and rammed around the tile to secure a firm bearing, and light soils should not be used immediately over or around the culvert. A heavy clay, a firm gravel, or a compact sand will answer, but vegetable mould, water, sand and light loams are subject to washouts.

As to the outlet, the culvert should be set nearly flush with the surface of the ground. If set higher than the surface, the fall of water will wash out a depression, and in time will undermine the end of the culvert. A too rapid grade will have the same effect, and it is well to cobblepave an outlet where this undermining action is likely to occur.

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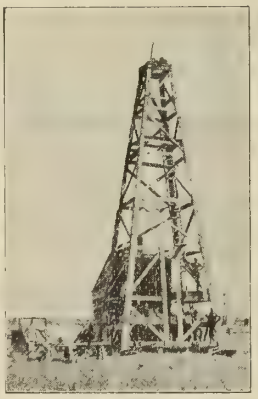

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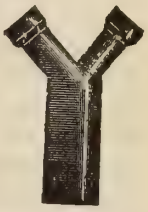
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CEMENT ACTION.

In a paper recently read before the Society of Chemical Industry, Mr. Bertram Blount stated that much progress had been made towards ascertaining what took place when Portland cement was mixed with water, and that the chief results had been obtained synthetically and by means of the microscope. It was tolerably certain that three silicates of calcium existed and four aluminates, and recent research tended to prove that certain solid solutions of these compounds were rearranged during the act of setting. For the sake of clearness, the term "alites" had been employed for the solution of tricalcic aluminate in tri-calcic silicate, and "celites" were solid solutions of di-calcic aluminates in di-calcic silicates. These were the chief compounds involved in cement reaction, and much the most important matter was the hydration of the alites, which was now believed to follow somewhat on the lines of the setting of plaster of Paris.

On account of the heavy duty imposed upon asphalt exported from Veneuela, the industry has been practically driven out of business. Mines have been closed and valuable works and miles of railroads have been abandoned because of the small profits derived since the law went into effect. Perhaps that was intended by the lawmakers, but they will appreciate their mistake in time.

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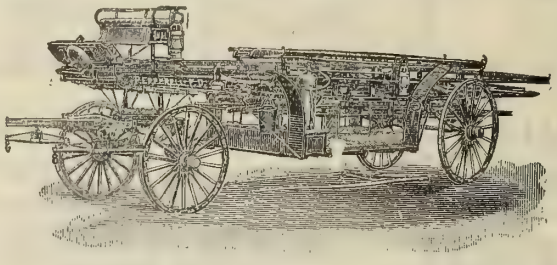
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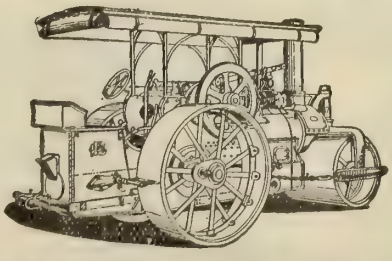
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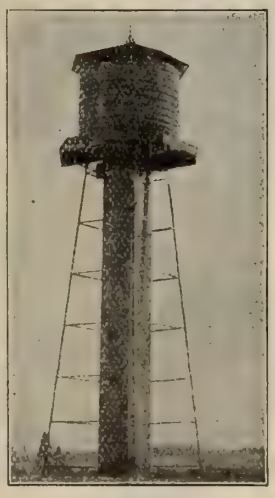

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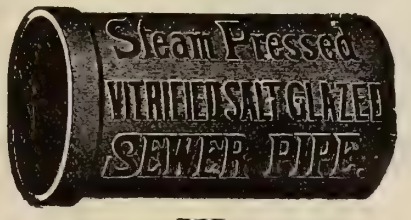

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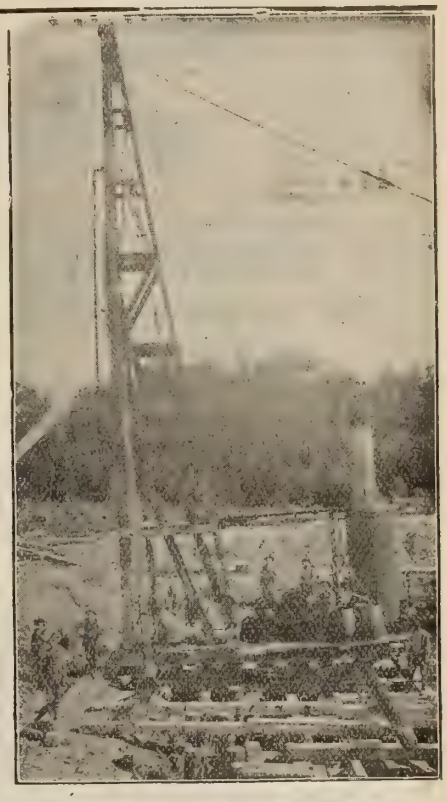

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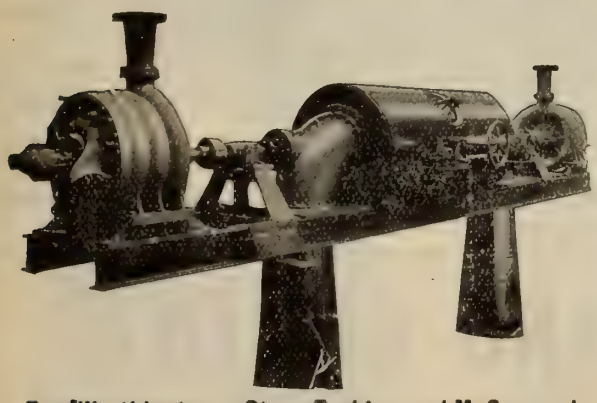

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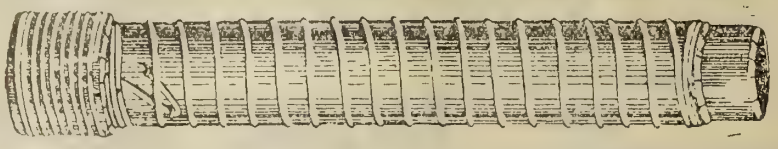

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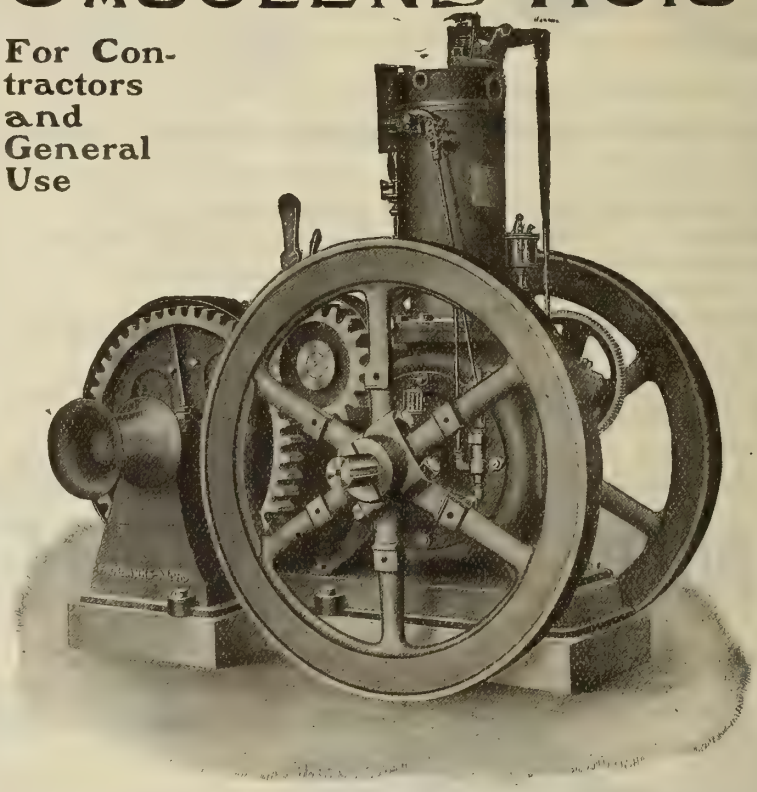

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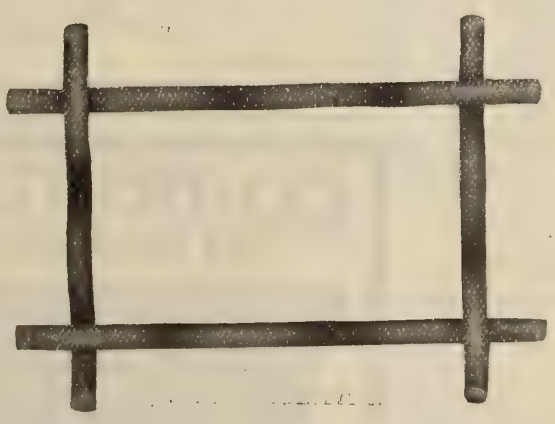

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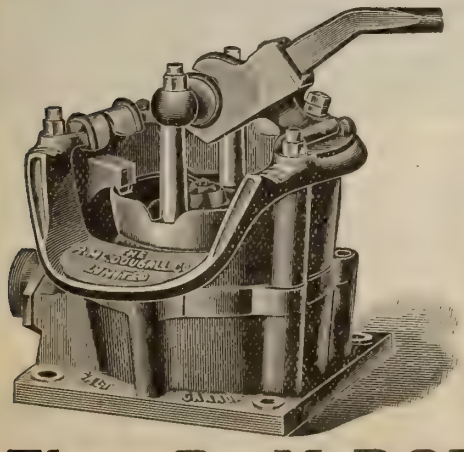

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" Buff	35 00
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" No. 2	15 00
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Roman Red (Size 12 x 4 x 1½ in.)	30 00
" Buff " "	30 00
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Vitrified Paving Brick No. 1	18 00
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1 inch No. 3, Pine cuts and better	38.00	40.00
1½ to 2 inch No. 3 cuts and better	40.00	42.00
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1 x 4, 6 and 8 Common	20.00	21.00
1 x 10 and 12 Common	21.00	24.00
1 inch mill run sidings	21.00	22.00
1 inch mill run	21.00	22.00
1 x 10 and 12 mill culls	17.00	18.00
1 inch dead cull sidings	12.00	13.00
1½ inch Flooring	27.00	28.00
Hemlock, 1 x 4 to 8 inch	17.00	18.00
2 x 4 to 8 inch, 12 to 16 feet	18.00	22.00
2 x 4 to 10 inch, 18 feet	20.00	19.00
1½ inch No. 1 4 ft. Pine Lath	4.75	5.00
1½ inch No. 2 4 ft. Lath	4.00	4.25
1½ inch No. 1 4 ft. Hemlock Lath		3.50
XXXX Pine Shingles	30.0	3.25
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B.C Shingles:		
XXX 6 butts to 2 inch		3.25
XXXX 6 to 23-16 inch		3.47
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Ash, white, 1sts and 2nds, 1 to 2 inch	$33.00 to	$35.00
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Basswood, Common and better, 1 to 1¼ inch	23.00	24 00
Basswood, 1½ to 2 inch	24.00	26.00
Elm, soft, mill run, 1 to 1½ in.	23.00	24.00
Elm, rock, mill run, 1 to 1¼ in.	23.00	25.00
Maple, common and better, 1 to 1½ inch	22.00	23.00
Oak red plain, 1sts and 2nds, 2 to 4 inch	44.00	46.00
Oak, white, 1sts and 2nds, 1 to 1½ inch	42.00	44.00
Oak, quartered, 1sts and 2nds	70.00	80.00

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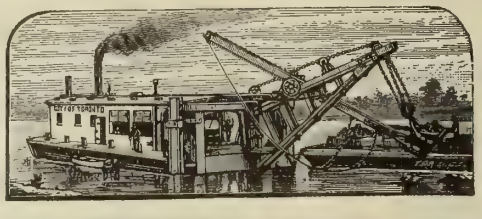

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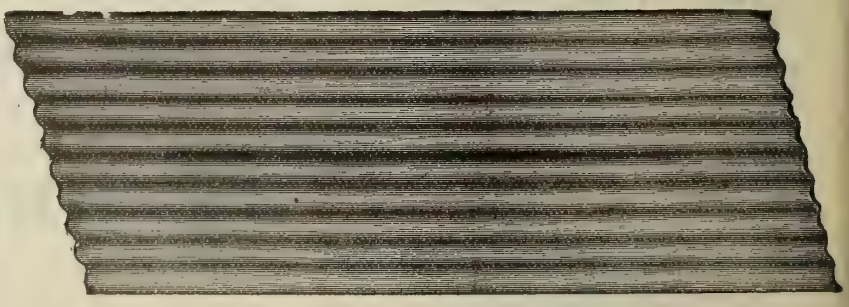

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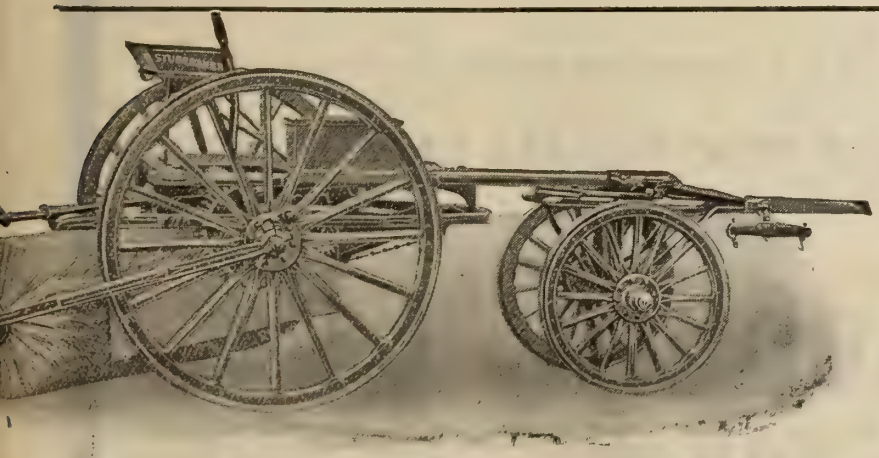

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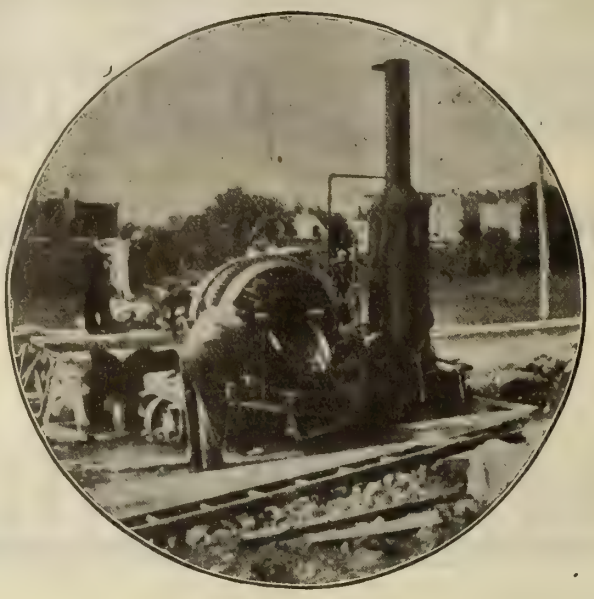

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The tilting mixer averaged 44 yards per day of 10 hours and required 16 men to operate, or a record of 2.7 yards per man. The **Ransome** mixer averaged 70 yards per day of 10 hours and required 13 men to operate, or a record of 5.3 yards per man. The **Ransome** mixer at the same time required 50 per cent. less power than the tilting mixer.

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CANADIAN

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A Weekly Journal of Engineering, Public Works, Tenders, Advance Information and Municipal Progress

This Paper Reaches Every Week the Town and City Clerks, Town and City Engineers, County Clerks and County Engineers, Leading Civil Engineers and Contractors throughout Canada, and Purchasers of Municipal Debentures.

VOL. 17. TORONTO, MONTREAL — NOVEMBER 28, 1906 — WINNIPEG, VANCOUVER No. 39

THE CANADIAN CONTRACT RECORD

PUBLISHED EVERY WEDNESDAY

As an intermediate Edition of the Canadian Architect and Builder.

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TENDERS FOR BELL

will be received by the undersigned up to the hour of 4 o'clock p.m. on THURSDAY, DECEMBER 6TH, 1906, addressed to Chatham, Ontario, for a bell weighing about 2300 pounds, same being in first class condition in every respect, and of superior tone.

Tenders may state a price per pound or a lump sum.

W. G. MERRITT,
City Clerk.

PLANS WANTED

The Dresden Public School Board invite architects to submit competitive plans for a Ten-Roomed School Building. Plans to be in the hands of the Secretary on or before DECEMBER 28TH, 1906. Fuller particulars regarding requirements will be furnished on application to

G. A. MILLER,
Secretary.

TOWN OF FORT WILLIAM

BOARD OF WATER AND LIGHT COMMISSIONERS

Sealed tenders addressed to the undersigned and endorsed "Tender for Water Works," for the construction of Section 3 of the Loch Lomond Water Supply, will be received up to 6 o'clock p.m. on WEDNESDAY, DECEMBER 15TH, 1906.

The work will consist of about five hundred feet of thirty-six (36) inch steel intake pipe, 4,500 feet of concrete-lined tunnel, 4,000 cubic yards excavation, concrete forebay, valves, etc.

Forms of tender may be obtained and plans and specifications inspected at the office of H. S. Hancock, Town Engineer.

The lowest or any tender not necessarily accepted.

A. McNAUGHTON.
Secretary.

Fort William, November 21, 1906.

CONTRACTS OPEN.

ELMVALE, ONT.—C. E. Copeland is about to erect a new saw mill.

TOLEDO, ONT. — A new Roman Catholic church is to be built here.

SYDNEY, N. S.—The Gulf Lumber Company will erect several new buildings.

SEAFORTH, ONT.—Asphalt pavements will be laid on Main street, to cost $26,500.

FORT WILLIAM, ONT.—A large brewery will be erected here at a cost of $75,000.

GUELPH, ONT. — Debentures will be issued for $5,000 for sidewalks and sewerage work.

MEDICINE HAT, ALTA. — J. L. Brown will erect a three story hotel on Montreal street.

SUDBURY, ONT. — St. Josephs Roman Catholic hospital will be enlarged, cost $40,000.

KINCARDINE, ONT.—The Grand Trunk Railway Co. will shortly erect a new station here.

DUNDAS, ONT. — The Toronto, Hamilton & Buffalo Railway may build a new station here.

HUNTSVILLE, ONT.—J. D. Brown has purchased a site on which he intends to erect a factory.

WALKERTON, ONT.—It is probable that an armoury will be erected here in the near future.

MILLTOWN, ONT.—The ratepayers recently voted against a by-law to install a fire alarm system.

CHARLOTTETOWN, P. E. I.—The city will issue debentures for $15,000 to replace those redeemed.

CAISTORVILLE, ONT.—New concrete abutments will be erected for the bridge west of the town line.

GLACE BAY, N. S.—The Dominion Coal Company will shortly erect large stables and a waggon shop.

STONEWALL, MAN.—The Council are considering the advisability of installing an electric light plant.

STRATHCONA, ALTA. — C. L. Bailey, of Cobourg, Ont., purposes to build large soap works here.

LACOMBE, ALTA.—The Methodist congregation here are about to erect a new church to cost $10,000.

VIRDEN, MAN.—Debentures will be issued for $5,000 to pay the cost of completing the school house.

EGLINTON, ONT.—The Bank of Montreal have purchased a site here and will erect a building thereon.

DEAD LAKE, ONT.—The Northern Ontario Consolidated Copper Co. are about to erect a large smelter.

CALGARY, ALTA.—Perfection Lodge, A. F. & A. M. are discussion the erection of a six story block to cost $85,000.

NELSON, B. C.—Knowler & Macauly have purchased two lots on Baker street and will erect a brick block thereon.

SWANSEA, ONT.—The Salvation Army have acquired a site on which they will erect a substantial brick building.

SELKIRK, MAN.—The ratepayers will vote on a by-law on December 18th to install a municipal telephone system.

PORT HOPE, ONT.—The Bank of Montreal have acquired a site here on which they intend to erect a building.

WOLFVILLE, N. S. —A public meeting has been called to discuss the installation of a municipal lighting system.

ST. CATHARINES, ONT.— The Sovereign Bank will erect a building on the site of the old Niagara Central office building.

BLENHEIM, ONT.—The question of installing a waterworks system may be voted on at the next municipal elections.

PETERBORO, ONT.—It is reported that the Quaker Oats Company will make extensive additions to their present premises.

REGINA, SASK.—Drs. Johnston & Cullum have had plans prepared for a new private hospital to be erected here next year.

ELMIRA, ONT.—A by-law was carried here authorizing the expenditure of $25,000 for an extension of the waterworks system.

PORT COLBORNE, ONT.—It is reported that the Great Lakes Cement Co. have leased land here on which to erect their works.

ARCOLA, SASK.—J. S. Bush, Town Secretary, will receive tenders up to December 1st for the purchase of $35,000 5½ per cent. debentures.

RED DEER, ALTA.— Authorities are considering the advisability of erecting a bridge over the Big Red Deer River west of the town.

PORTAGE LA PRAIRIE, MAN.— A large station and freight sheds will be erected here by the Grand Trunk Pacific and Midland Railways.

LADNER, B. C. — The farmers of Ladner will combine with the farmers of Lulu Island for the purpose of constructing a telephone system.

KILDONAN, MAN.—The question of erecting a bridge across the Red river, at cost of $100,000 will be submitted to the ratepayers on December 18th.

NORTH TORONTO, ONT.—A by-law will be voted on by the ratepayers to raise $10,000 for the installation of fire alarm and incandescent lighting system.

PEMBROKE, ONT.—Plans prepared by the town engineer for the laying of a new intake pipe have been approved of by the Provincial Board of Health.

NEW WESTMINSTER, B. C.—The Board of Trade will seek financial assistance from the Dominion Government for building a bridge ove the Fraser river.

MIMICO, ONT.—A building 153 x 66 ft. having a gallery with seating capacity for 200 will be erected by the Victoria Industrial School at a cost of $3,000.

PORT ARTHUR, ONT.—H. Matthews, architect, Winnipeg, will shortly call for tenders for the erection of buildings for the Meisel Manufacturing Company.

AMHERSTBURG, ONT.—J. H. C. Leggatt, Town Clerk, will receive tenders up to December 4th for purchase of $12,442.45 local improvement debentures.

BELLEVILLE, ONT. — The City Council have decided to engage the services of an engineeer to report on the cost of installing a general sewerage system.

WESTASKIWIN, ALTA.—The installation of a sewerage system, the laying of several sewers and erection of two hospitals to cost $25,000,are proposed for next year.

WELLAND, ONT.—The Robertson Machinery Company, at a meeting of the directors recently, decided to erect several new buildings in connection with their plant.

LEAMINGTON, ONT —The Leamington Electric Light Co. have applied to the council for a thirty year franchise. They intend to remodel and enlarge their plant.

BRANTFORD, ONT.—The Brantford Starch Company will add two stories to their factory.—Pratt & Letchworth will erect additions to their premises to cost $6,000.

GRAVENHURST, ONT. — Plans will be prepared for the erection of a new administration building for the Muskoka Free Hospital for Consumptives, cost $15,000.

KNOWLTON, QUE.—The Orford Mountain Railway Company are seeking permission from the Dominion Government for an extension of time in which to construct their line.

BARRIE, ONT.—W. A. Boys, Solicitor, will seek incorporation for the Barrie & Orillia Railway Co., to construct lines from Grenfell to Barrie, Barrie to Orillia, and branches.

HENSALL, ONT.—A by-law will be submitted to the voters of the Township of Tuckersmith for permission to raise $15,000 by debentures for construction of bridges. A.G. Smillie,Township Clerk.

BRACEBRIDGE, ONT. — T. T. Simpson, C. E., Ottawa, Ont., has made application to the Minister of Lands, Forests and Mines, for permission to develop water power at South Falls, on the Muskoka river.

ARCOLA, SASK.—The time for rereceiving tenders for purchase of $30,000 5½ per cent. waterworks debentures and $5,000 5½ per cent. town hall debentures has been extended to March 1. J. S. Bush, Secretary.

BRANDON, MAN.—A new rink is to be erected here 200 x 116 feet. Plans have been prepared by W. R. Marshall. —It is reported that a brick block will be erected on Princess street. The site was recently purchased by F. Nation.

LONDON, ONT.—A by-law will be submitted to the ratepayers for permission to raise $575,000 by debentures for water works extension.

LACHINE, QUE.—The Manufactures Cotton Company are asking for a bonus of $25,000 and exemption from taxes for 25 years. If the council grants their request they agree to build a factory to cost $800,000.

WINDSOR, ONT. — The Distilled Water Ice Company has been formed to carry on the business of manufacturing artificial ice. Their plant will cost $65,000. The promoters are Geo. E. Osler, R. Druland, and W. H. Everett.

STRATFORD, ONT. — The City Council have recommended the construction of concrete sidewalks to cost $1,134.—The Water Commission have recommended the purchase of a new tubular boiler to be installed in the pumping station.

MORRIS, MAN,—A by-law will be submitted to the ratepayers to raise the following sums by debentures: $7,500 for installing a gas plant; $3,500 for the construction of a bridge across the Red river; $15,000 for the prupose of retiring the present debentures held by the C. P. R.

LETHBRIDGE, ALTA.—The City Council have made an agreement with the Alberta Light Co. to bore for natural gas. The company's expenditure will be in the neighborhood of $10,000.—Tenders will shortly be called for the erection of covered grand-stand for the Lethbridge Athletic Association.

PRINCE ALBERT, SASK.—W. H. MacBeth, of Edmonton, has purchased the Prince Albert Hotel and will extensively remodel same. He will also erect a new hotel next spring.—The Public School Board will ask architects to submit plans for a new Collegiate Institute.

DURHAM, ONT.—Rev. A. A. Bice will receive tenders up to December 1st for mason work, carpenter work and painting required in the erection of an English church in the township of Egremont.

ST. THOMAS, ONT. — The St. Thomas Canning Company will erect several new buildings next spring.—The City Council have decided to open up a new street to be known as Beverley street. It will be brick paved and sewer, gas and water mains will be put down.

AMHERST, N. S.—Engineer Locke, of the Public Works Department, Ottawa, is making plans and estimates for a large extention to the pier here.—The Town Council have approved of plans submitted by the town engineer for sewerage extension.

WINGHAM, ONT.—The Canadian Bank of Commerce have secured a site on Josephine street and will erect a large building next spring.—J. Wilson will build a brick block.—The town council have decided to issue debentures for $16,500 for the purchase of a site and erection thereon of a High School.

OWEN SOUND, ONT.—The Grand Trunk Railway have taken an option on the Lymburner property, corner of Frost and Stephen streets, with a view, it is said, to erecting a new station and offices thereon.—The Huron & Ontario Electric Railway Company have applied to the Ctiy Council for a franchise to operate a street railway.

NIAGARA FALLS, ONT.—E. D. Pitt, architect, is receiving tenders for the erection of a building for the Peaslee Shoe Company.—J. P. Murray,and A. E. Osler, of Toronto, and others, are seeking incorporation for the Niagara Frontier Bridge Co., to construct a bridge over the Niagara river from the boundary line between the townships of Stamford and Niagara to a point on the right bank.

SASKATOON, SASK. — Capitalists have been here looking for a site on which to erect a new theatre to cost $25,000.—The parishioners of Christ's church will erect an edifice to cost $50,000.—Charles Mitchell, C. E., Niagara Falls, Ont., has been engaged by the town council to report on the feasibility of obtaining power from the Cole Falls —Gordon & Sparling will erect a large brick building on Eleventh street.

TORONTO, JUNCTION, ONT.—Building permits have been granted as follows: J. Colvin, two and a half-storey brick residence, 70 Keele street south, cost $2,800; A. McGill, two and a half storey brick and stone residence, 112 Keele street south, cost $2,500; Wm. Preston, two and a half story brick and stone residence, 116 Keele street south, cost $2,500; John Drummer, two two and a half story brick residences, 78 and 80 Keele street south, cost $2,900 each.

QUEBEC, QUE.—The Committees appointed to report upon the best system of communication between the Quebec bridge and the city will recommend that a line of railway with docks built out into the stream to 55 ft. of water be constructed from the bridge parallel with Champlain street, with a union railway station at Champlain market. The estimate of the improvements along the river front, with the proposed railway terminals,is $15,000,000.—A building permits has been issued to G.Grenier for a building on Grant street, cost $3,000.—A new union station will be built here by the differents railroads.

VICTORIA, B. C.—Pitcher & Lieser will erect a large building here.—The City Council have approved of the expenditure of $17,000 to improve Elk Lake.—Tenders will be received up to December 3rd for the erection of a Custom House at Osoyoos, B.C. Plans with W. Henderson, architect, Victoria. —W. R. Wilson, architect, will prepare plans for extensive improvements to be made to the Vernon block.—The Howe Sound Copper Co. intend to install a 600 ton furnace at their smelter at Crofton, B. C.—Hutchison Bros. will erect two large machine shops here.

WINNIPEG, MAN.—The Fairchild Implement Company will erect a seven story building on Princess street. H. B. Rugh, architect, has plans prepared.—J. W. Pulford will erect a three story building on Portage avenue, cost $35,000.—H. Matthews, architect, has prepared plans for the Meisel Mfg. Company's buildings at Port Arthur, Ont.—The Royal Bank have purchased the premises of the Imperial Dry Goods Co. on Main street, and intend to remodel same.—The T. Eaton Co., Ltd., have acquired property next to their present building and will erect thereon a six story structure. — The building now occupied by the Manitoba Club on Garry street has been purchased by a syndicate and will be remodelled into an office building.

HAMILTON, ONT.—The Provincial Board of Health have approved of the city engineer's plans for the East End sewage scheme. — The Canada Screw Company will erect several new buildings.— The Fire & Water Committee have made application to the city council for $50,000 for electric pumps for the waterworks and $30,000 for an East End fire station. — The fire chief has asked for $100,000 for additions to the fire fighting equipment.—G. L. Glassco, George W. Robinson and John Lennox have decided to erect three large wholesale warehouses and it is also roported

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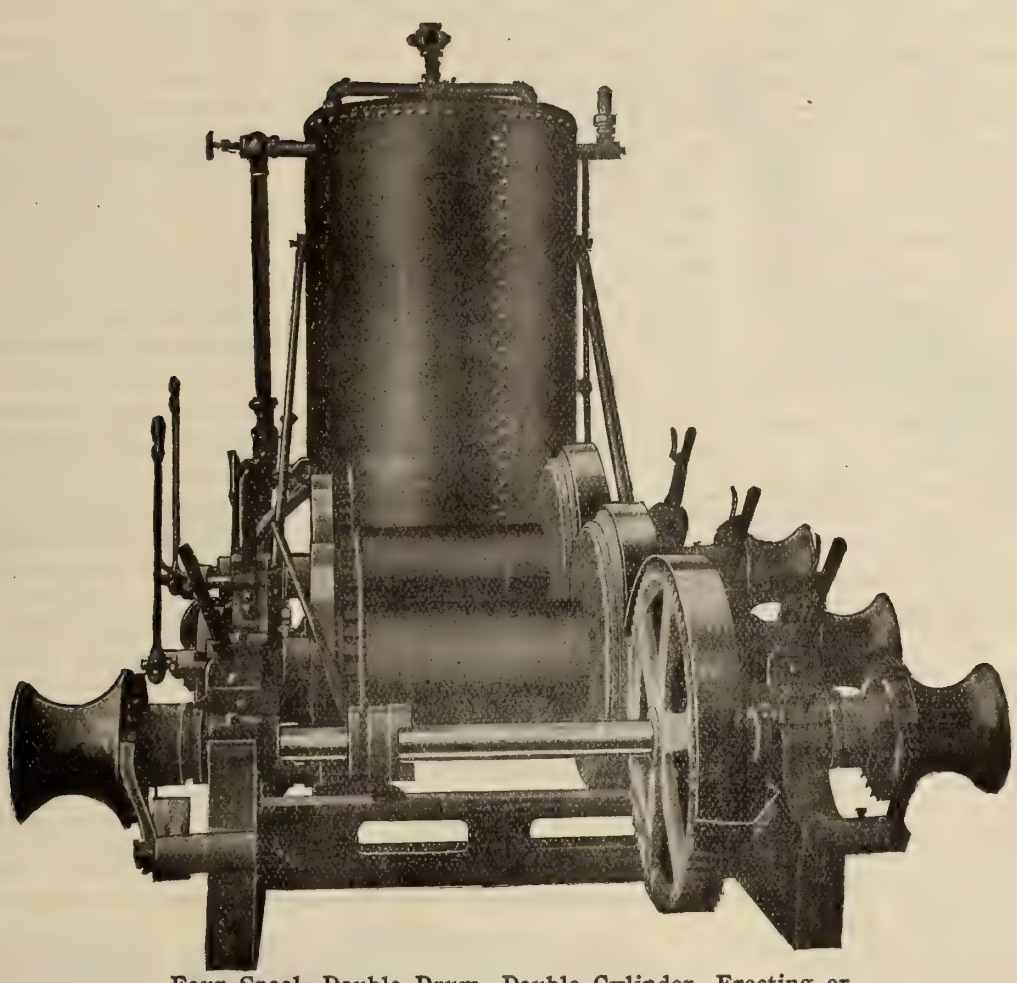

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MONTREAL

that three stories will be added to G. W. Robinson and Co.'s store.—Byers Bros. have taken out a building permit for a brick house on Aikman avenue, to cost $1,600, and John Stuart will build two brick houses on Stanley avenue to cost $5.000.—Building permits has been issued to Byrnes & Spence, architects, for a brick house on Cannon street, cost $2,100.—A by-law will be submitted to the ratepayers at the next election to raise $120,000 for the sewerage system in the East End and $75,000 for the erection of an Isolation hospital.

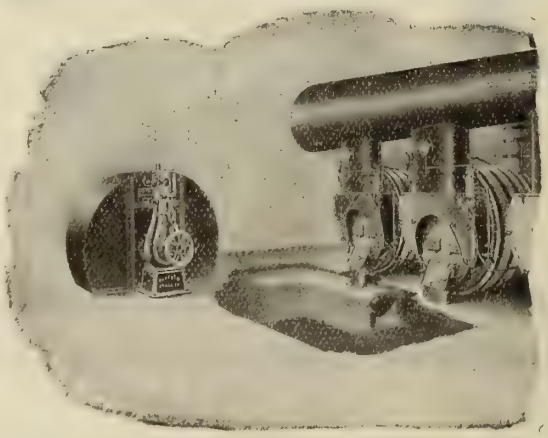
EDMONTON, ALTA.—It is expected that the Warren Co., of Toronto, will receive an order for 80,000 yards of bitulithic pavement and that the Dominion Carbilineum Co., Vancouver, B. C., has an order for 30,000 yards of blocks.—Short, Cross & Biggar will make application at the next session of the Dominion Parliment on behalf of the Athabaska Railway Co. for an extension of time in which to construct their road and for authority to build a railway from For McMurray to Fort Smith.—Debentures will be issued for $40,500 for the purchase of an incinerator and construction of the plant.—The Bellamy Co. are about to erect a new warehouse on Eigth street.—Local contractors are now figuring on the new post office to be erected on McDougall street.—The Canadian White Co. have taken over the street railway franchise recently relinquished by the Taylor Construction Co.—F. Perkins has taken out a permit to build a dwelling on Victoria avenue to cost $2,500 and a dwelling on Seventh street to cost $3,000.

OTTAWA, ONT.—The City have applied to the Ontario Railway and Municipal Board for permission to raise $50,000 by debentures for extension of the municipal lighting plant.—A company is seeking permission to construct a railway from the Northern boundary of the Province of British Columbia to Dawson City. Henry Blitz and Louis Aurebach, Boston, Mass., are the applicants.—The Klondyke Mines Railway Co. are applying to the Dominion Parliament, through their solicitors, McGivern & Dadon, for an extension of time in which to construct their railway. —The St. Joseph Transportation Co. are seeking incorporation at the present session of the Dominion Parliament to construct a canal from Lake Huron to Lake Erie. J. U. Vincent is solicitor for the applicants.—The Edmonton, Dunvegan & British Columbia Railway Co. are seeking incorporation. They intend to construct a railway from Edmonton, Alta., to Fort George, B. C. Pringle & Guthrie, solicitors, are making the application.—J. B. T. Garon is applying to the Dominion Parliament on behalf of the Crawford Bay & St. Mary's Railway Co. for authority to construct a road from Lethbridge, Alta., to Hartney, Man.

VANCOUVER, B. C.—Building permits have been issued to Telfer & Frater for a new lumber mill to be erected at the foot of Laurel street, to cost $40,000, and to E. B. Deane for a theatre to cost $60,000. — It is reported that Frye, Bruhn & Co., of Seattle, contemplate establishing a packing plant in this city. —Plans have reached here from Darling & Pearson, architects, Toronto, for the proposed Canadian Bank of Commerce building to be erected on the corner of Granville and Hastings streets. The exterior of the building will be very striking, having fluted stone columns 40 feet in height and 5 feet in diameter. The estimated cost of the building is $450,000. — The City Council are considering the advisability of constructing bridges across False Creek at Westminster avenue and Granville street.—Barber & Company will erect a new factory on the south side of False Creek, cost $4,000.—A gymnasium is to be erected in connection with Columbia College. —The Vancouver & Coast Kootenay Railway Co. are asking the Dominion Government, through their solicitor, D. G. Macdonell, for an extension of time in which to commence and complete their road. — The British Columbia Electric Company will enlarge their plant at a cost of $250,000.—The school board is asking for $50,000 to build a new school in East Vancouver, cost $7,000; a new school in South Vancouver, cost $7,000, and other improvements and new buildings, $36,000.

MONTREAL, QUE.—The Council have given notice of their intention to construct sewers in the following streets: Chestnut street ,from St. Antoine avenue to Grand Trunk Railway, in St. Henry Ward; Cote St. Paul road, from Dagenias street, northwards, in St. Henry ward; Napolean road, from Notre Dame street to Duvernay street, in St. Cunegonde ward; St. Antoine street, from Atwater avenue to Brook street, in St. Henry ward; Parthenais street, from Amity street to North city limits, in St. Mary's ward; Gilford street, from Cardinal street to Papineau avenue, in St. Denis ward; Cardinal street, from Gilford street to Laurier avenue, in St. Denis ward; Gowan street, from Comte street to St. Zotique street, in St. Denis ward; Sheppard street, from Amity street to Hochelaga, in St. Mary's ward; Amity street, from Sheppard street to Dufresne street, in St. Mary's ward; Dufresne street, from Lariviere street to Amity street, in St. Mary's ward.—Dymend & Duffield, of London, Ont., have been granted a permit for erection of a new theatre, cornerof St. Catharine and City Councillor streets, cost $70,000.—The Royal Bank of Canada have purchased property on the southeast corner of Stanley and West St. Catharine streets and intend erecting a bank building thereon. —Smith, Markey & Skinner, are seeking the authority of the Federal Government on behalf of the Athabaska Northern Railway for extension of time in which to construct their road.—Additions will be made to the Sailer's Institute at a cost of $28,000.—The Point St. Charles Congregational church have acquired property on Wellington street and intend to erect a new edifice.—A site has been purchased at 334 St. James street by the Castle Tea Blend Co., who will in all probability erect a large building. —H. C. Stone, architect, has prepared plans for the erection of three stores on Phillips Place, to cost $40,000.—A new concert hall is to be erected on Drummond street with a seating capacity of 2,500. Mr. J. W. Shaw is interested in the scheme.

TORONTO, ONT. — Tenders are wanted at 98 King street west for all trades for erection of residence on Pearson avenue.—The Phillips Manufacturing Co. will shortly erect a new factory on Carlaw avenue, to be two stories with 132,000 ft. of floor space.—The Canadian Northern Ontario Railway are seeking authority of the Dominion Parliament to construct nine lines of railway in various parts of Ontario.—The Canadian Northern Railway Co. are seeking authority of the Dominion Parliament to construct several branch lines and extensions in Western Canada.—It is reported that the Confederation Life Association will build an extensive addition to their building.—The City Engineer has recommended the laying of water mains in the north-western part of the city, to cost $81,775.—The Board of Control have approved of plans submitted by G. W. Gounilock, architect, for the new grand stand and Horticultural building.—The Directors of the King Edward Hotel are considering the erection of two additional stories.—The Argonant Rowing Club have asked for eight acres of land on Mugg's Landing, Centre Island, on which they purpose erecting a club building.—L. Foulds, architect, 43 Victoria street, wants tenders for alterations and extensions to a building on Church street.—Sherman



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Cooper, manufacturer of gasoline engines and boats, has applied to the Board of Control for a block of land on the Don river 200 x 100 ft. on which to erect his factory.—Tenders will be received by the Board of Control up to December 4th for construction of the following sewers: Queen street, from Woodward avenue to 400 ft. east of Coxwell avenue; Shaw place, from Shaw street west 450 ft.; Carling avenue, from Bloor street north 300 ft.—Plans have been submitted by the City Architect, for the new bathhouse on the western sand bar to cost $9,500.—The Canadian Northern Railway proposes to divert the Don river for 1,200 ft., at a cost of about $300,000.—A new wing will be added to the Parliament Buildings next spring, including a library building. An appropriation for the work will likely be made at the forthcoming session.—Gourlay, Winter & Leeming are about to erect a factory on Logan avenue.—An English church will be built on Gerrard street east, corner Ashdale avenue. The Rev. Wm. L. Baynes Reid will be rector.

CONTRACTS AWARDED.

LETHBRIDGE, ALTA.—Erection of a skating rink: Thos Stubb, contractor.

ST. JOHN, N.B.—Erection of street railway car sheds: Clark & Adams, successful tenderers.

STRATFORD, ONT.—$49,000 debentures have been awarded to Wood, Gundy & Co., Toronto.

BRANTFORD, ONT.—Buildings for he rantford Starch Company: Riddells Wright, contractors.

VICTORIA, B.C.—Alterations and additions to Fell and Company's store: Dickson & Howes, successful tenderers.

ST. THOMAS, ONT.—$16,000 gas

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extension debentures: Wood, Gundy & Co., Toronto, purchasers $15,880.

VIRDEN, MAN.—Rebuilding of elevator for the Virden Elevator Co.: C. E. Bennel, Brandon, Man., successful tenderer.

TOTTENHAM, ONT.—Heating and ventilating of Christ's church: James Smart Mfg. Co., Brockville, successful tenderers.

VICTORIA, B. C.—Residence on Foul Bay road for Mr. Jameson and residence on South Turner street for F. W. Davey: A. McCrimmon, contractor.

LONDON, ONT.—Heating and ventilating building for the Forest City Paving Company: James Smart Mfg. Company, Brockville, successful tenderers.

WOODSTOCK, ONT. — Erection of barn, stable and driving house for Woodstock Hospital for Epileptics: Nagel & Mills, Ingersoll, Ont., successful tenderers, at $5,000.

MONTREAL, QUE.—R. M. Rodden, architect, has prepared plans for a new concert hall to be erected on Berthelet street at a cost of $50,000. A. Reeves is the general contractor.

TORONTO, ONT.—Building of new storehouse at the Rose avenue fire hall: Carpenter work, Dinnis & Son, $1,493; painting and glazing, F. E. Phillips, $75; roofing, Rennie & Son, $487; masonry, E. Gearing, $2,900.

PORTAGE, LA PRAIRIE MAN. — Damming, bridging and enlarging of Crescent Lake: V. C. Maddock & Company, sucessful tenderers.—Erection of a large temporary station for Midland Railway: Kerrick and Company, St. Paul, Minn., contractors.

EDMONTON, ALTA.—Erection of a new Y.M.C.A. building: May, Sharp Construction Company, Edmonton Alta. contractors.—55,000 yards Bitulithic pavement: Warren Bituminous Paving Company, Toronto, Ont., successful tenderers at $3.25 per square yard; 32,950 square yards Carbolineum block pavement: Dominion Carbolineum Company, Vancouver, B. C. successful tenderers at $3,65 per square yard.

BIDS.

WINNIPEG, MAN. — The following tenders have been received by the City Council for the superstructure of the Redwood avenue bridge over the Red river: Algoma Steel Bridge Co., $92,000, with an alternative offer of $94,550; Ontario Bridge Co., $97,200; Heenan and Fronda, Manchester, England, $102,144; Dominion Bridge Co., $88,800; William Jackson, $278,000.

HALIFAX, N. S. — The City Works Commission, opened tenders for the erection of a new engine house. They consider the tenders too high and will likley modify the plans in order to reduce the cost. Those submitted were: E. J. Horne, $23,760; E. Maxwell, $20,690; M. E. Keefe Co., 19,000; W. Lownds, $19,500 and S. Marshal & Son, $18,000.

AN INTERESTING EXPERIMENT IN WOOD PAVING.

Wood has long been used for street pavements. Only within the past few years, however, has it been satisfactorily adopted in the cities of the United States. Previous failures according to a bulletin issued by the United States Department of Agriculture, can be traced almost entirely to improper construction or methods of preparation. In most cases round blocks of cedar or other woods were used, without precautions against decay and without adequate foundation for the pavement. The consequence was that, as a paving material, wood fell into disfavor.

Recent use of rectangular wooden blocks for street pavements has given excellent results. Many engineers believe that these blocks, when properly creosoted and laid on a concrete foundation, make a pavement which possesses high excellence in a greater number of essential qualities than any other now in use. Among these qualities are great smoothness, low traction resistance, minimum noise, and, considering its smoothness, comparatively little slipperiness. Slipperiness has sometimes proved objectionable, but is not greater for wood than for sheet asphalt, all temperature conditions considered; and wood is much less variable in this particular than is the asphalt. It is probable that no other pavement with equally slight traction resistance will be found less slippery. Wood pavement is also easy to clean and to maintain, and when well laid gives promise of proving more durable than any other except one constructed of the hardest granite.

The cost of creosoted wood pavement is at present comparatively high, averaging about $3 per square yard, including concrete foundation. In several cities, however, the cost of the pavement has been reduced materially below this figure, and good results have been secured. In Minneapolis, Minn., where the city itself lays the pavement, the total cost per yard is approximately $2.50. To attempt to cheapen the price, however, at the expense of thoroness of treatment or careful construction is, with creosoted wood pavement, particularly dangerous economy. Even at the prevailing price, the excellence of this pavement causes many engineers to regard it as the best general-purpose one now in use.

The five cities in which the largest amounts of wood pavement are found are, in order, Indianapolis, New York, Minneapolis, Toledo, and Boston. Together, these cities have more creosoted wood pavement than all other cities in the United States combined. The total amount of this pavement in use in this country at the end of the year 1905 was about 1,400,000 square yards, equivalent to nearly 80 miles of pavement on a street 30 feet wide.

Two main causes have militated against a wider adoption of the creosoted block pavement. One has been the prejudice which was engendered by tne former experience with wood, the other is the rise in price of longleaf or Georgia pine, which is the wood now principally used. The Forest Service of the United States is making investigations to find out what woods are most suitable for use in paving, and whether less expensive woods could not be used to supplement the Georgia pine. The investigations have been upon three lines—to learn the present situation, to make tests of the suitability of various woods, and to lay experimental pavements and note their wear under actual traffic conditions.

An experimental pavement has now been laid in the city of Minneapolis, as a cooperative undertaking between the city government and the Forest Service. Different woods were donated, in lots of 15,000 board feet, by a number of lumber companies or lumber associations interested in extending the market for their respective woods. Creosote and treatment were contributed by two manufacturers of wood pavement.

The woods used were longleaf pine, Norway pine, tamarack, white birch, western larch, and Washington fir. All blocks were laid with the grain vertical, and were 4 inches in depth, 4 inches wide, and from 4 to 10 inches long. These blocks were impregnated with creosote and laid upon a foundation of Portland cement concrete. Successive sections of the pavement were laid in different woods. Also the angles of the courses were varied, one being at right angles to the traffic, another at 45 degrees, and a third between the two, or 67½ degrees.

This experimental pavement was laid on a street which carries the heaviest traffic of the city, so that comparative results can be obtained in as short a time as possible. Traffic records will be made twice a month, on different days of the week, and from these records an accurate knowledge of traffic conditions may be obtained.

This investigation should furnish definite information on the following points: The suitability of the various woods, the relative value of heartwood and sapwood, the best dimensions for the blocks, and the most serviceable angle for the courses.

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Regina	21,215 sq. yds.	St. Catharines	4,600 sq. yds.
St. Boniface	18,272 sq. yds.	Total	129,161 sq. yds.

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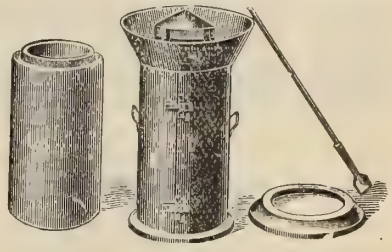

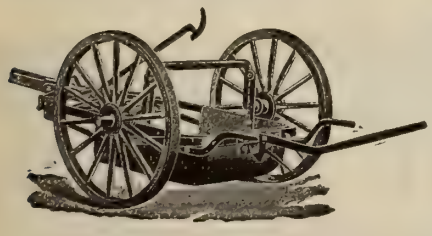

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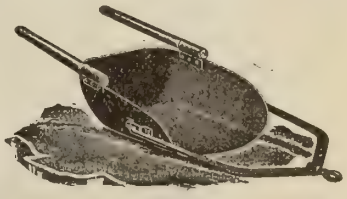

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Notes on the Septic Tank Process of Sewage Purification*

By W. R. Butler. M. Can. Soc. C. E.

It is but comparatively lately that the biological purification of sewage by the Septic Tank Process has been practically applied under climatic conditions at all similar to those of Canada in the winter season; recent experiences, however, in the colder parts of the European continent, in the Northern United States, and in Canada itself, have dispelled all doubts as to its applicability, and some discussion of this most interesting process, with a few notes on the history of its development, may not at this time be out of place.

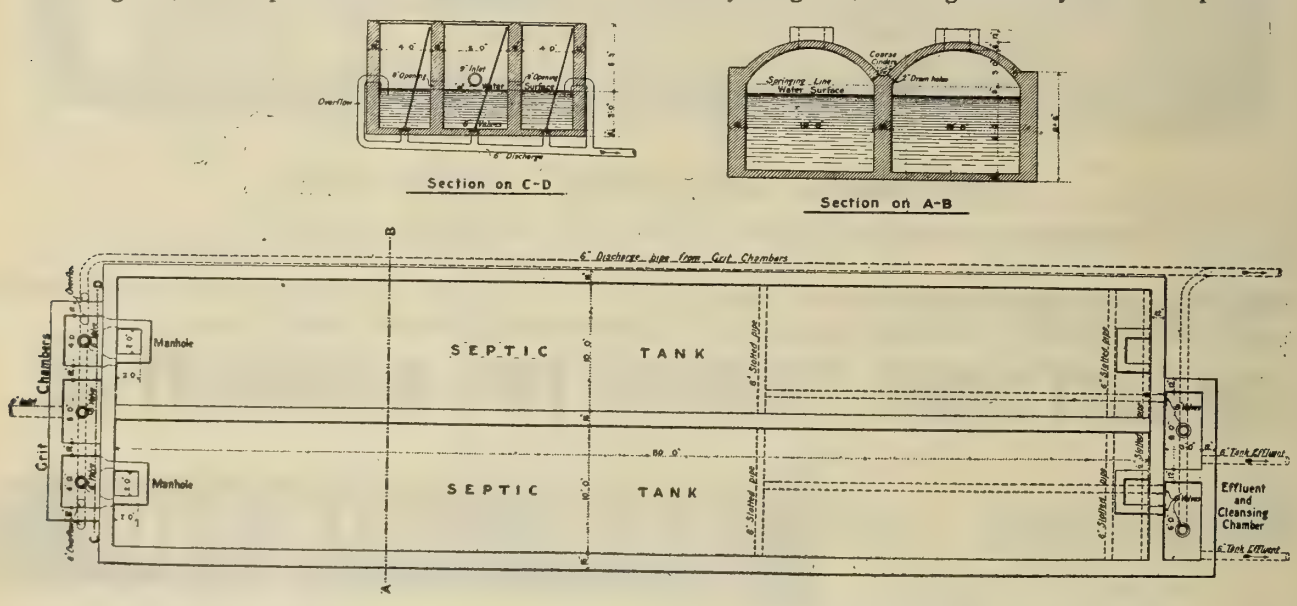
The most obscure secrets of biological science may never yield to human enquiry, nevertheless, universally accepted interpretations of many of its phenomena instruct us to recognize, in the performance of a host of apparently simple and natural transformations, incidental to the comforts and necessities of every-day life as well as to its risks and dangers, chapters in the life histories of tiny living organisms which need magnifying perhaps thousands of times to render them visible. Take, for examples, the processes involved in the production of butter and cheese, the making and baking of leavened bread, etc., etc., as also many of the more tragic developments in the courses of human disease.

Now-a-days we recognize this to be eminently true with respect to the transformations which are required in order that the world may be kept sweet and clean, in spite of its constant polution by the waste products of domestic life, and we are beginning to appreciate the services of myriads of tiny workers whom nature has commissioned to this purpose, and to realize that the existence of life itself upon our earth to-day is as much dependent upon agencies such as these as it is upon the great movements and interchanges of physical energy.

In referring to the important problem of disposal of waste, it would be interesting, if there were space, to enumerate, at length, some of the efforts, with their attendant measures of success, which have been directed, from time to time, towards its solution; for a long period these were, for the most part, of but one character, viz: the removal of putrescent matter to a supposed safe distance, where the processes of decomposition might be completed outside the limits of detection by the ordinary senses. Success, in such cases, turned much upon the density of the population served, its general surroundings, nature of soil, and particular climatic conditions. By degrees, however, the indirect effects of such treatment in the contamination of water supply and in the spread of disease in various other ways, added, in our own times, to a recognition of probable waste in the mis-appropriation of elements required by nature for the completion of her economy, prompted efforts to discover how the unavoidable residues, incidental to application of the products of the soil and atmosphere to the needs of mankind, might be returned to their sources without passage through intermediate stages that were a menace to human wellbeing.

To these efforts are due various classes of expedients, from those of the sewage farm to the chemical and mechanical processes of purification, which latter generally aim either at rapid transformations, by artificially bridging over steps in the natural process, or merely at the production of a material easy of mechanical transportation, with, in some cases, a further laudable effort to make economic use of the substances produced.

The gigantic operations which have been in these ways involved may be illustrated by mentioning that the sludge chemically precipitated from the London sewage for the purpose of mechanical transport is carried to sea in barges at the rate of something like two millions of tons annually; that the city of Chicago has been forced to modify the drainage system of the Great Lakes of America, to provide water carriage of its waste; that the city of Berlin finds it necessary, in its efforts to restore waste products directly to the soil by the processes of agriculture, to cultivate over 19,000 acres, and to spend from $13 to $20 for every 1,000,000 gallons of sewage disposed of, besides applying a capital of over $6,000,000 to a return of only 1% per annum, although the city of Berlin possesses exceptional facilities for carrying out such a process cheapiy.



The immediate and essentail object of the sewage farm and, in general, of the various chemical or mechanical processes of purification, is the production of a final effluent which may be discharged without danger into some stream or convenient body of water.

The degree of purification, as measured by the character of this final effluent, may rise to 90% in the case of the sewage farm, but it is evident that treatment in this way is in many cases quite impossible, both on account of climate and of the land area required.

With the various "short cuts" of chemical and mechanical purification, the effluents arising from different processes show a removal of from 30% to 90% of putrescible organic matter, accomplished, in most cases, by proportionate expense quite comparable with that quoted above; the process always being accompanied by that most troublesome of incidentals—the necessary removal of the solid residue, or the "Sewage Sludge." It must

*Paper read before the Canadian Society of Civil Engineers.

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be said also that, despite all theory to the contrary, it has, so far, been found absolutely impossible to so treat domestic sewage as to make the process pecuniarily remunerative.

As already stated, the percentage of purification, as shown by chemical or biological analyses, is generally taken as a measure of the degree of safety with which the effluent produced may be discharged into a stream of running water, and finally disposed of so far as the producers are concerned ; but it is very necessary to bear in mind, in connection with this matter, that mere diminution in germ life and cessation of biological activity are of themselves insufficient evidence of permanent gain in purity; for the latter turns entirely upon the history of the process and the nature of the causes which may have led to an apparently satisfactory biological condition of any such effluent.

A mere sterilizing process, by means of antiseptics, may produce an effluent showing, in itself, marked freedom from germ life, which, nevertheless, when the antiseptic ingredients have become diluted by admixture with sufficient quantities of pure water, may permit a development of bacterial life, and a putrefactive condition which will sometimes compare unfavorably even with that of the original sewage.

A perhaps unjust and sweeping denunciation of most methods of chemical and mechanical sewage purification, as carried out 40 years ago, was pronounced by an English commission, appointed at the time to enquire into their efficacy, when it was declared that "As applied to sewage, disinfectants do not disinfect, and filter beds do not filter."

This last clause leads one to speak of the place of the sewage filter in connection with these matters. The passage of a fluid through a porous medium, for the purpose of purification by mechanical straining, is probably as old as mankind; it would be taught by a very superficial observation of nature. The Egyptian woman who fills her porous earthenware pitcher with comparatively clear water, by allowing the turbid waters of the Nile to filter through it is, no doubt, continuing a custom of the highest antiquity, but it is very lately, indeed, that anything has been recognized in the purifying action of a granular or porous filtering medium beyond a mere mechanical straining.

One of the earliest hints, to the general reader, of a recognition of anything more than this, appeared in the Encyclopædia Britannica not 25 years ago, when, in an article on the action of filtering media, the following fact was mentioned as but recently observed, viz: That the diminishing efficiency in the purifying action of a filter, arising from continuous uninterrupted use, might very frequently be quite arrested by simple rest and aeration of the filter. We have since learnt that the reason for this is a remarkable biological fact, and it is a part of the intention of this paper to refer very briefly to some highly important consequences of its discovery, with that of certain co-ordinate principles.

Purification of sewage, to be satisfactory, must involve the entire breaking-up and oxidizing of organic compounds and putrescible matter present, and their complete transformation into either harmless elements or stable compounds without any of the offensive and injurious consequences which attend the natural processes of ordinary spontaneous (and generally slow and imperfect), putrefactive decomposition. Now, it has been clearly shown that mere contact with the oxygen of the air is quite inadequate to effect this, and that the passage of sterilized air through sewage, produces no change in the oxidizable organic matter contained, and moreover, that subsequent decomposition of sewage, which has itself been sterilized, is invariably accompanied by offensive putrefaction.

Most of us know by experience that in the processes of agriculture and in the effects of soils and vegetation upon putrescible matter, the offensive accompaniments of decomposition are largely absent. A most important announcement, tending towards an explanation of this, was made in 1877 by Mr. R. Warrington, based upon investigations which he had been carrying on at Rothampstead in England, and Mr. Warrington was able conclusively to demonstrate that "the oxidizing and breaking up of organic compounds present in the soil, without what is commonly known as putrefaction, could never be accomplished by mere contact with air present in the soil (as had been supposed), but were entirely dependent upon the life processes of minute living organisms.

Since that time an immense deal of effort has been directed by individuals and by sceintific associations towards the bearing of this principle upon methods of sewage purification, and through the investigations of such as Mr. Dibden, Chief Chemist to the London County Council, members of the Massachusetts State Board of Health, Mr. Scott Moncrieff, and many others the world over, the fact has gradually been realized that "all sewage purification processes, to be successful, must be subordinated to the requirements of micro-organisms, by whose agency alone such purification can be completed."

This being the case, it becomes evident how directly opposed to Nature's law is any process, the essential features of which are attempts at a sterilization which would suspend, if not destroy, the agencies commissioned by nature to the work in hand.

Quite early in these investigations it was noticed that in the breaking-up of organic compounds by certain classes of bacteria, which need the constituents for their development and sustenance, the decomposition was accompanied by a process of liquefaction, and it was later on asserted by Mr. Scott Moncrieff that, on account of this, biological purification of sewage was fully possible without the previous removal of organic matter in suspension, and that a process properly carried out on this principle need not involve the tremendous difficulty and expense attendant upon the dealing with sewage sludge, a difficulty inseparable from any chemical or precipitation method of treatment.

It is found, moreover, that crude sewage invariably contains the germs of living organisms, to the development and life of which certain of the constituents of the decomposable matter present are a necessity. The activities of these organisms vary greatly with changes in environment, and Mr. Scott Moncrieff was probably the first to announce that the purification of sewage which went on under biological action consisted of two distinct consecutive stages, during which the operations of the bacteria upon decomposable matter were exactly opposite in character—the process being "Anærobic" during the first stage, and in the second stage, "Aerobic."

In the first, the micro-organism obtained for its nourishment and development its necessary supply of oxygen by the process of the breaking down of organic compounds, and of abstracting the necessary oxygen from these compounds themselves ; hence, this process is possible out of contact with air ; its results are accompanied by liquefaction of solids and a reduction in the complexity of the organic matter in solution.

This process will continue so long as a supply of oxygen is in this way available in the body of sewage and is available from no other source.

Upon the exhaustion of this internal oxygen supply the further life process of the micro-organism can only be carried on in the presence of air ; but in its presence an oxidation and nitrification of albuminous and ammonia compounds in solution ensues as a direct consequence again of biological activity, which, under the latter condition, is accordingly termed "Aerobic." Moreover, it has been shown that the decomposition which takes place during both these stages will

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Buffalo Forge Co. 4

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Steel Concrete Co. 15

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Canada Foundry Co. 23
Dominion Bridge Co. 15
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Phoenix Bridge and Iron Works 15

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Page
Harvey, J. 20
Peat & Sons, James 14

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Stimson & Co., G. A. 21

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Canadian White Co. 8

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Page
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be fermentative or putrefactive,* according, in a great measure, to the time allotted to each process respectively.

Without a minute discussion of the complex character of ordinary sewage, we may notice that the organic matter which it contains consists usually of an immense variety of highly complex compounds, largely nitrogenous or hydrocarbon, the decomposition of which, by the abstraction of oxygen, will naturally lead to nitrogenous compounds of simpler chemical composition, together with such stable products as water, ammonia, carbonic acid gas, marsh gas, free hydrogen, and free nitrogen.

Ammonia in solution in a liquid produced by natural causes would be taken as probable evidence of previous decomposition of organic matter; albuminoid ammonia, as indicating a danger of further putrefactive decomposition. The more stable products mentioned above, so far as danger of the latter is concerned, may be considered harmless. If a sufficient further oxidation of the ammonia compounds can be effected to convert the ammonia into nitric acid, the danger of putrefaction is averted; the net result will be that gases which have been liberated will have been returned to the air; the remaining nitrogen will experience nitrification and, in this beneficial form, will return to the earth with the liquid in which it is present in solution: so that the journey begun by the constituents orginally present in soil and air, for the beneficient purpose of ministering to the needs of vegetable and animal life, ends in the return of these constituents to their original sources.

Now it has been ascertained that such changes as these, and in the order given, are precisely those effected by the instrumentality of the minute organisms to which we have referred; that these changes will infallibly be effected by them if only suitable conditions are provided for their activities, and moreover, that the micro-organisms themselves, required to effect these changes, are invariably found to be present in sewage in a crude state.

The importance of these facts cannot be over-estimated; their discovery bears distinct analogy to the recognition in medicine of the principle of the "Vis medicatrix naturae," which may, perhaps, be said to have revolutionized modern therapeutics.

Nine years ago the first efforts to provide the conditions essential to

*Decomposition (other than that due to slow natural decay), is divided by Liebeg into two classes, "Fermentative" and "Putrefactive"; the products of the latter are unstable, and are generally nitrogeneous compounds capadle of again entering amongst themselves into more or less complex further combination: Putrefactive decomposition is usually accompanied by offensive odour. Fermantative decomposition, on the other Land, gives rise to products stable in character, and it is, generally speaking, unaccompanied by offensive odours. The first si an inseparable accompaniment to the decomposition of nitrogenous organic matter;

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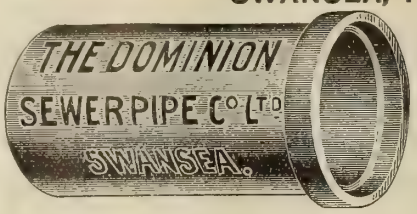

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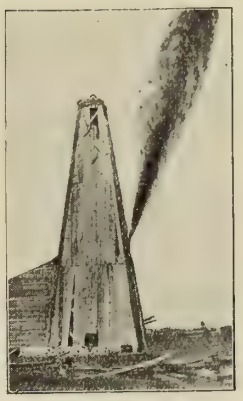

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biological processes, such as we have described, upon a scale applicable to domestic sewage purification, were begun by Mr. Donald Cameron, the City Engineer of Exeter, England. Mr. Cameron's work and its results are now historic.

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(To be continued in next issue.)

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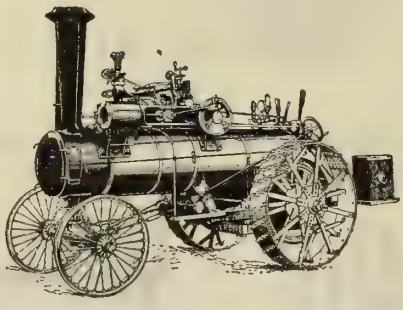

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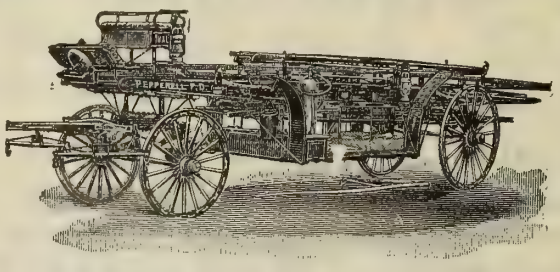

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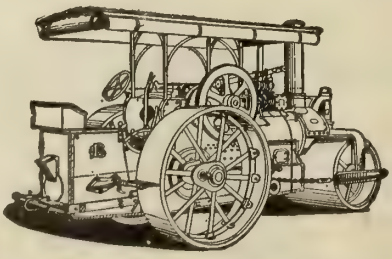

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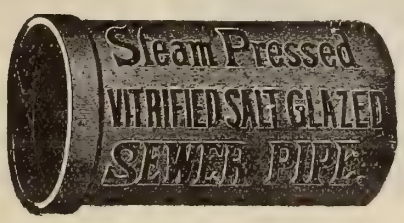

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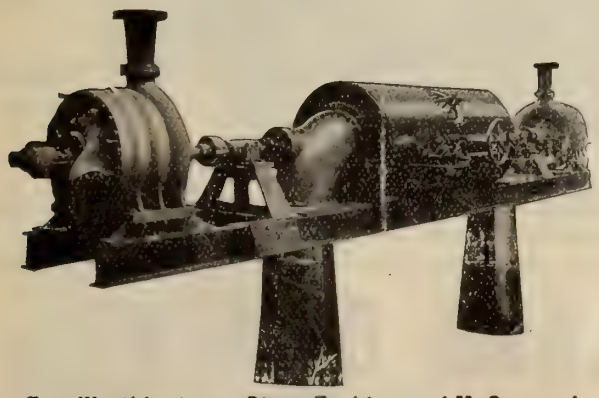

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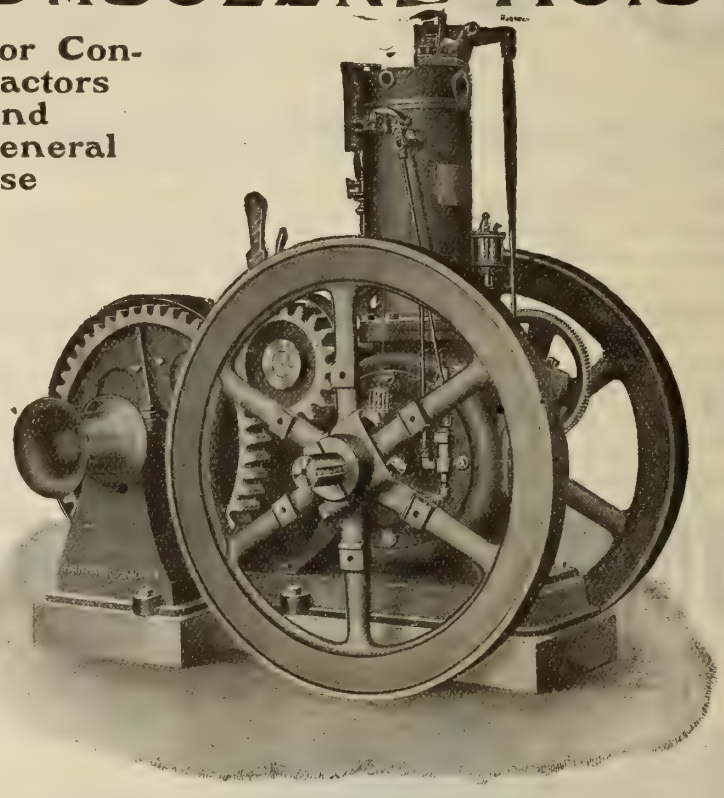

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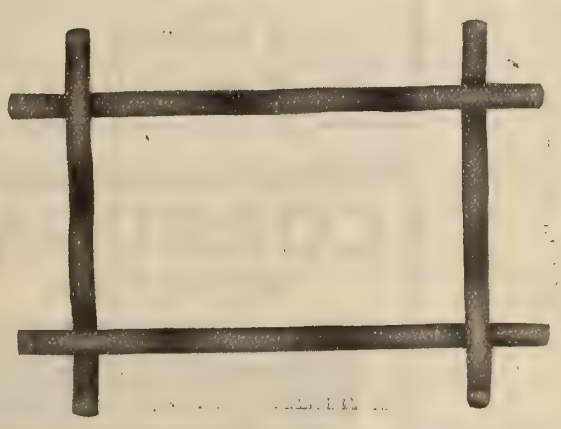

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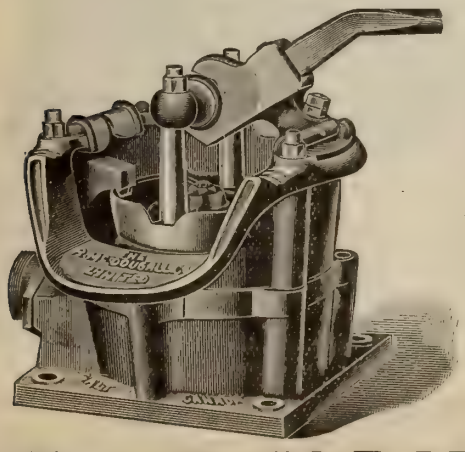

DIAPHRAGM PUMPS

For Contractors' Use.—This class of pump will handle about anything than is wet and their usefulness has been shown in thousands of cases. We try always to have a few on hand for Emergency orders, also extra Diaphragms and 3" Suction Hose and Fittings.

Try us once if in a hurry or even if you have lots of time.

We also Supply

Manhole Covers and Frames, Catch Basins, Pavement Plates, Etc.

The R. McDOUGALL COMPANY, Limited.
GALT, CANADA.

Prices of Building Material

PRESSED BRICK, Per M.

TORONTO PRESSED BRICK AND TERRA COTTA WORK

	F.O.B. Milton, Ont.
Red No. 1	$13 00
" 2	11 50
" 3	10 00
Buff No. 1	17 00
" 2	13 00
Brown	25 00
Roman Red	30 00
" Buff	35 00
" Brown	40 00
Hard Building	8 00
" Sewer	8 00
" Backing	7 00

Moulded and Ornamental from $2.00 to $5.00 per 100.
Terra Cotta String Courses and Frieze, from 50c. to $2.00 per ft. run.
Roofing Tiles, $20.00 per 1,000.

DON VALLEY BRICK WORKS.

Nos. 1, and 2, Red Pressed Bricks
Nos. 1 and 2 Buff Pressed Brick
No. 1 Brown Pressed Brick
Pompeiian Red, Buff and Brown Pressed Bricks
Ornamental Bricks of all kinds for Mantel purposes
Enameled Bricks of all Colors
Porous Terra Cotta Fireproofing of all Descriptions
Vitrified Street-Paving Bricks
Semi-Vitrified Foundation Bricks
Common Stock Red and Grey Bricks
Sewer Bricks
Stone or Macadamized Roadways

Please write to head office, 34 Toronto St. Toronto, for catalogue and prices.

BEAMSVILLE BRICK AND TERRA COTTA CO.

	F.O.B. Beamsville.
Red Peerless Facing	$16 00
" No. 1	14 00
" No. 2	12 00
" No. 3	10 00
Brown Peerless Facing	20 00
" No. 1	18 00
Buff Peerless	20 00
" No. 1	18 00
" No. 2	15 00
Moulded and Ornamental Brick from $3 to $10 per C	
Roman Red (Size 12 x 4 x 1½ in.)	30 00
" Buff " " "	30 00
" Brown " " "	35 00
Vitrified Paving Brick No. 1	18 00
" " " No. 2	15 00
Sewer	8 00
Roofing Tile	22 00

LUMBER

CAR OR CARGO LOTS, F.O.B. TORONTO.

	Per M. Ft.	
1 inch No. 1 Pine cuts and better	$49.00 to	$51.00
1½ to 2 inch No. 1 cuts and better	54.00	56.00
1 inch No. 3, Pine cuts and better	38.00	40.00
1½ to 2 inch No. 3 cuts and better	40.00	42.00
1 inch Pine Dressing and better shorts	24.00	26.00
1 x 4, 6 and 8 Common	20.00	21.00
1 x 10 and 12 Common	21.00	24.00
1 inch mill run sidings	21.00	22.00
1 inch mill run	21.00	22.00
1 x 10 and 12 mill culls	17.00	18.00
1 inch dead cull sidings	12.00	13.00
1½ inch Flooring	27.00	28.00
Hemlock, 1 x 4 to 8 inch	17.00	18.00
2 x 4 to 8 inch, 12 to 16 feet	18.00	22.00
2 x 4 to 10 inch, 18 feet	20.00	19.00
1½ inch No. 1 4 ft. Pine Lath	4.75	5.00
1½ inch No. 2 4 ft. Lath	4.00	4.25
1½ inch No. 1 4 ft. Hemlock Lath		3.50
XXXX Pine Shingles	30.0	3.25
XX Cedar Shingles	2.25	2.30
B.C. Shingles:		
XXX 6 butts to 2 inch		3.25
XXXX 6 to 23-16 inch		3.47
XXXXX 5 to 2 inch		3.80

HARDWOODS—PER M. FEET CAR LOTS.

Ash, white, 1sts and 2nds, 1 to 2 inch	$33.00 to	$35.00
Ash, black, 1sts and 2nds, 1 to 1½ inch	28.00	30.00
Birch, M. R. 1 inch	22.00	24.00
" 1½ inch to 2	23.00	25.00
Basswood, Common and better, 1 to 1¼ inch	23.00	24 00
Basswood, 1½ to 2 inch	24.00	26.00
Elm, soft, mill run, 1 to 1½ in.	23.00	24.00
Elm, rock, mill run, 1 to 1¼ in.	23.00	25.00
Maple, common and better, 1 to 1½ inch	22.00	23.00
Oak red plain, 1sts and 2nds, 2 to 4 inch	44.00	46.00
Oak, white, 1sts and 2nds, 1 to 1½ inch	42.00	44.00
Oak, quartered, 1sts and 2nds	70.00	80.00

WESTERN DEBENTURES

We are always open to buy all classes of Manitoba, Saskatchewan and Alberta Debentures.
We are the largest buyers of Western School Debentures in the Dominion of Canada.

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Successors to
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Lafarge (NON-STAINING) Cement

PORTLAND CEMENT FIRE BRICKS
DRAIN PIPES FIRE CLAY
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F. HYDE & CO.,
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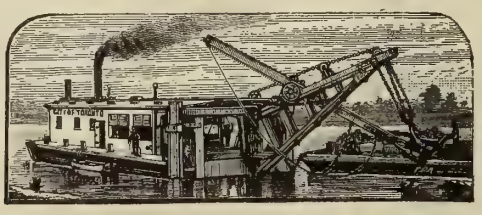
M. BEATTY & SONS, LIMITED
WELLAND, ONTARIO, CAN.



Dredges, Ditchers, Derricks Steam Shovels,

Submarine Rock Drilling Machinery, Mine Hoists, Hoisting Engines, Centrifugal Pumps for Water and Sand, Stone Derricks, Clam Shell Buckets, Steel Skips, Coal and Concrete Tubs, and other Contractors' Machinery.

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Yards 75-81 " "
Long Distance Phone North 1787.

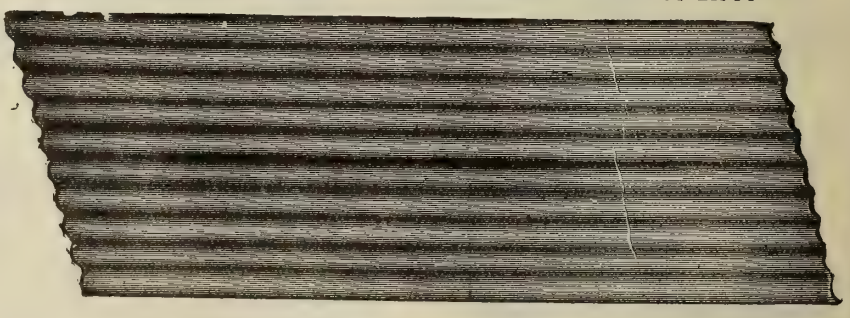
VULCANITE PORTLAND CEMENT
The Recognized Standard for Sidewalks

A strictly High-Grade Portland Cement. Pronounced by prominent contractors to be the most Uniform Portland Cement on the market.

One Quality Only. Capacity 5,000 bbls. per day.

The Toronto Pottery Co., Limited, Toronto, Ont.

CORRUGATED IRON
600 TON STOCK. PROMPT DELIVERY.



Pedlar's Corrugated Steel Sheets are manufactured on a **38,000 lb. Oh Press**—one corrugation at a time—and are guaranteed straight and true to size **Six Hundred Tons in Stock in Oshawa, Montreal, Toronto, Ottawa and London,** in gauges varying from 28 to 18, both painted and galvanized. Made in 1", 2" or 2¾" corrugation—corrugation lengthwise or across the sheet. Sheets 2 3, 4, 5, 6, 8 or 10 feet long at no extra charge. **Ask for Catalogue No. 14 R** and give specifications for prices.

We are the lagest makers of Sheet Metal under the British Flag.
ESTABLISHED 1861 — CAPITAL INVESTED, $250,000.

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Write your nearest office. Head office and Works, OSHAWA, ONT.
"Keeping Everlastingly at it Brings Success."

Head Office and Works,

Toronto, Ont.

CAST IRON PIPE FOR WATER OR GAS

Special Castings,

Tees, Crosses, Flanges Pipe, Valves, Hydrants,

Stand Pipes, Valve Boxes, Drinking and Ornamental Fountains.

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Telegraphic Address: "Dredging" Fairfield Building, VANCOUVER, B. C.

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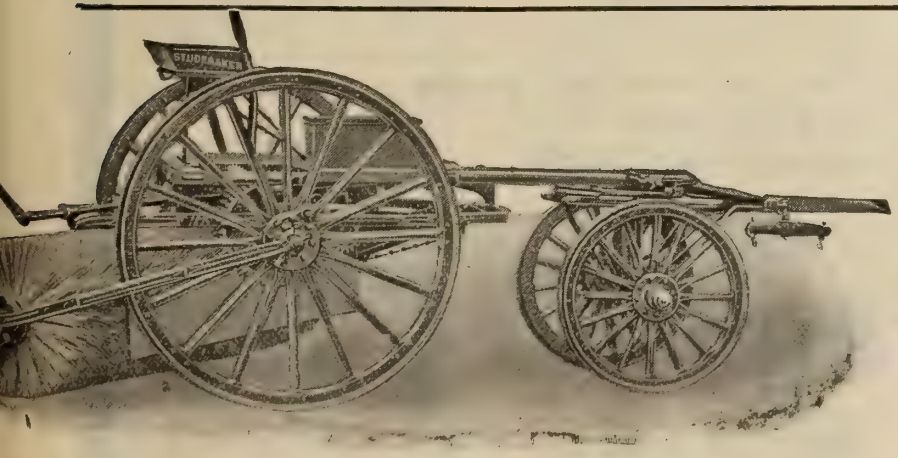
Bridges
Concrete Construction
Harbor Works
Railways
Dredging and Reclamation



Stackpole Patent Improved **Street Sweeping Machine** Is the Standard of Perfection

Because no sweeper so effectually does the work for which it is designed as "The Studebaker." It Sweeps Clean. No sweeper is constructed with the same degree of care and mechanical precision. It Wears Well. "The Studebaker" has the smallest number of working parts, and has less gearing than any other sweeper made. It is free from all unnecessary complications. With reasonable care it does not get out of order. Send for complete descriptive catalogue.

Studebaker Sprinkler

(PATENT IMPROVED.)

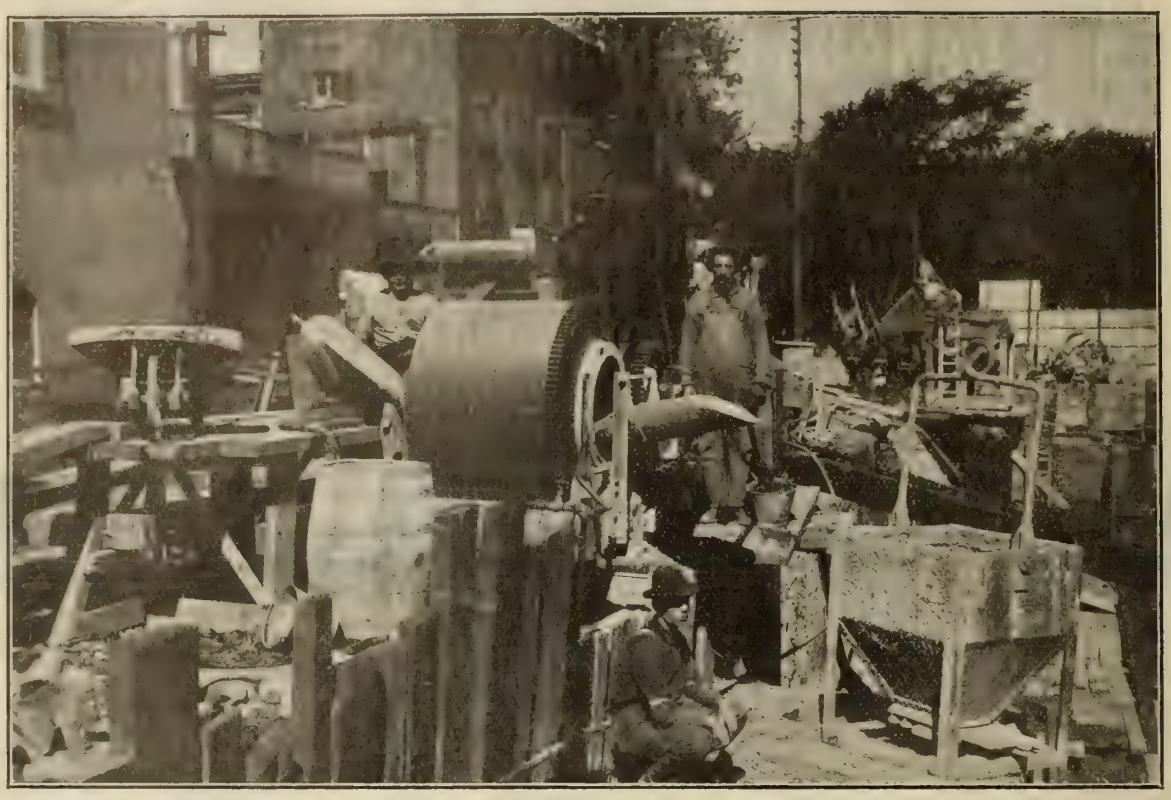
Does not clog or get out of order. Greatest width of spray Can be graded from driver's seat to any volume.

We also make an . . .

IMPROVED VERTICAL SPRAY

for Pavements

Geo. Herman, Mnfr., London, Ont.



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are the most up-to-date machines on the market.

The Ransome Mixer is used extensively on all large contracts to-day. The above illustration shows one of our No. 1 Ransome Mixers, owned by Peter Lyall & Sons, at work on the New Windsor Hotel—MONTREAL.

SIMPLE IN CONSTRUCTION — EFFICIENT — EASY TO OPERATE

We Supply Mixers: **With or without power**
all capacities
on skids or trucks.

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Successors to the Late James Cooper
MONTREAL
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CANADIAN

CONTRACT RECORD

A Weekly Journal of Engineering, Public Works, Tenders, Advance Information and Municipal Progress

This Paper Reaches Every Week the Town and City Clerks, Town and City Engineers, County Clerks and County Engineers, Leading Civil Engineers and Contractors throughout Canada, and Purchasers of Municipal Debentures.

VOL. 17. TORONTO, MONTREAL — DECEMBER 5, 1906 — WINNIPEG, VANCOUVER No. 40

THE CANADIAN CONTRACT RECORD
PUBLISHED EVERY WEDNESDAY
As an Intermediate Edition of the Canadian Architect and Builder.

THE C. H. MORTIMER PUBLISHING COMPANY
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WANTED

Capable man who understands sewer construction to represent us in Canada. Information given on application.
BLAW COLLAPSIBLE STEEL CENTERING CO.,
717 Westinghouse Building, Pittsburg.

Tenders for Debentures

VILLAGE OF ACTON

Tenders will be received by the undersigned for the purchase of $3954.36, twenty-year, four per cent. Permanent Pavement Debentures of the Village of Acton, up to SATURDAY, 8TH DECEMBER.

The highest or any tender not necessarily accepted. All particulars given upon application to

THOS. T. MOORE,
Municipal Clerk, Acton, Ont.

TOWN OF FORT WILLIAM

BOARD OF WATER AND LIGHT COMMISSIONERS

Sealed tenders addressed to the undersigned and endorsed "Tender for Water Works," for the construction of Section 3 of the Loch Lomond Water Supply, will be received up to 6 o'clock p.m. on WEDNESDAY, DECEMBER 15TH, 1906.

The work will consist of about five hundred feet of thirty-six (36) inch steel intake pipe, 4,500 feet of concrete-lined tunnel, 4,000 cubic yards excavation, concrete forebay, valves, etc.

Forms of tender may be obtained and plans and specifications inspected at the office of H. S. Hancock, Town Engineer.

The lowest or any tender not necessarily accepted.

A. McNAUGHTON.
Secretary.

Fort William, November 21, 1906.

CLERK OF WORKS
seeks engagement, thoroughly experienced in all branches of public and private work, good references. J. GREENWOOD, 4 Briggs Avenue, Toronto.

TENDERS FOR CITY SUPPLIES

Sealed tenders for 1907 supplies for the City of Calgary, Alberta, will be received by H. E. Gillis, City Clerk, until the 31ST OF DECEMBER, 1906, for the following materials:

CEMENT,
LE D PIPE,
CORPORATION COCKS,
CAST IRON WATER PIPE,
SEWER PIPE.

Specifications may be obtained from the City Engineer. The lowest or any tender not necessarily accepted.

R. E. SPEAKMAN,
City Engineer.

INTERCOLONIAL RAILWAY

NOTICE TO CONTRACTORS

Sealed tenders addressed to the undersigned and endorsed "Tender for Shops," will be received at this office until 16 o'clock on MONDAY, THE 10TH DECEMBER, 1906, for the construction and erection of Locomotive Shops in the yard of the Intercolonial Railway at Moncton, New Brunswick.

Plans and specifications of the works can be seen on and after this date at the office of the Chief Engineer of the Department of Railways and Canals, Ottawa; at the office of the General Manager of Government Railways, Moncton, N. B., and at the office of the Superintending Engineer of the Canals of the Province of Quebec, No. 2 Place d'Armes, Montreal, at which places forms of tender may be obtained.

In the case of firms there must be attached the actual signatures of the full name, the nature of the occupation and place of residence of each member of the same, and further, an accepted bank cheque for the sum of $30,000 must accompany the tender; this accepted cheque must be endorsed over to the Minister of Railways and Canals, and will be forfeited if the party tendering declines entering into contract on the terms stated in the offer submitted.

The accepted cheques thus sent in will be returned to the respective parties whose tenders are not accepted.

This Department does not, however, bind itself to accept the lowest or any tender.

By order,
L. K. JONES,
Secretary.

Department of Railways and Canals,
Ottawa, 9th November, 1906.

Newspapers inserting this advertisement without authority from the Department will not be paid for it.

FOR SALE

Canadian patent rights, covering patent collapsible steel center for concrete culvert and other viaduct construction. Information given on application.
BLAW COLLAPSIBLE STEEL CENTERING CO.,
717 Westinghouse Bldg, Pittsburg Pa.

PLANS WANTED

The Dresden Public School Board invite architects to submit competitive plans for a Ten-Roomed School Building. Plans to be in the hands of the Secretary on or before DECEMBER 28TH, 1906. Fuller particulars regarding requirements will be furnished on application to

G. A. MILLER,
Secretary.

Builders and Contractors

TENDERS FOR

NEW GRAND STAND AND HORTICULTURAL BUILDING

Bulk tenders addressed to the undersigned will be received through registered post only, up to noon on

MONDAY, DECEMBER 17TH, 1906,

for the various works required in the erection and completion of a grand stand, also of a horticultural building, on the Exhibition Grounds, Toronto.

Plans and specifications may be seen, and all information, together with forms of tender, obtained at the office of Mr. George W. Gouinlock, architect, Temple Building, Toronto.

Tenders must be accompanied by a marked cheque, payable to the order of the City Treasurer, or a cash deposit, equal to 5 per cent. on tenders up to $1,000, and 2½ per cent. on tenders over that amount.

Should any party whose tender is accepted fail to execute the necessary contract and bond and give satisfactory security for the due fulfillment of the contract, the deposit accompanying the tender will be forfeited to the city.

A penalty sufficient to insure the full completion of the work on or before the 10th day of August, 1907, will be exacted.

The lowest or any tender not necessarily accepted. The deposits of unsuccessful tenderers will be returned.

EMERSON COATSWORTH, Mayor,
Chairman Board of Control.

City Hall, Toronto, November 30th, 1906.

Mr. Alfred Jackson, president of the Jackson Building Company, Winnipeg, Man., will be a candidate for Alderman in Ward 4.

Mr. D. J. Stone, clerk and treasurer of the Township of Pelham, died very suddenly on November 27th.

CONTRACTS OPEN.

MOUNT FOREST, ONT.—Cement sidewalks will be constructed here at a cost of $1,771.

REGINA, SASK. — Authorities are looking for a site on which to erect a Y. M. C. A. building.

EGLINTON, ONT.—It is reported that the Methodist congregation will erect a new church.

GRANBY, QUE.—Arthur Wallace has purchased property here and will erect a tenement house.

MILLBROOK, ONT.—It is probable that a gas lighting system will be installed in the near future.

TREHERNE, MAN. — The ratepayers will vote on a by-law to establish a muncipal telephone system.

BARRIE, ONT.—A by-law to loan the Dyment Foundry Co. $12,000 has been defeated by the ratepayers.

NICOLA, B. C. — The Provincial Government will construct a bridge across the river at a cost of $2,500.

RAINY RIVER, ONT.—The Council are considering the question of extending the sewerage and waterworks system.

BRANTFORD, ONT.—The Y.M.C. A. authorities are considering the erection of a new building at a cost of $30,000.

BELLEVILLE, ONT.—Plans for the new Isolation hospital have been approved of by the Provincial Board of Health.

BATTLEFORD, SASK. — A site opposite the post office has been purchased on which to erect a hotel to cost $30,000.

MEAFORD, ONT.—Plans have been prepared for a church to be erected for the Methodist congregation, to cost $18,000.

PARRY SOUND, ONT.—The Canadian Pacific Railway will construct a bridge over the Seguin river, at a cost of $300,000.

PINKA, MAN.— A public meeting held here recently was unanimously in favor of installing a municipal telephone system.

THORNBURY, ONT. — A by-law will be submitted to the ratepayers for authority to expend $5,000 for cement pavements.

PRESCOTT, ONT.—The Dominion Central Railway Co. are asking for an extension of time in which to complete their lines.

MOUNT PLEASANT, N. B.—T. H. Estabrooks has purchased property here and will erect a brick and stone residence.

KAMLOOPS, B. C.—J. J. Carment, City Clerk, is taking new tenders up to December 6th for the construction of a septic tank.

BOISSEVAIN, MAN. — The ratepayers are considering the installation of a waterworks and sewerage system at a cost of $115,000.

CHATHAM, ONT.—The City Council have decided not to erect the proposed new pumping station until the Niagara power question is settled.

WATERLOO, QUE. — The Protestant School Commissioners are taking tenders for a new school building to be erected here next spring.

ST. CATHARINES, ONT. — St. Catharines General & Marine Hospital Association are considering the question of building a new hospital.

EXSHAW, ALTA.—English capitalists will erect a large cement works here. George Middleton, of Winnipeg, is representing the company.

SEAFORTH, ONT. — Tenders will be received up to December 13th by J. A. Wilson, Town Clerk, for the purchase of $56,500 debentures.

WATERDOWN, ONT.—The Grand Trunk Railway have decided to erect a subway here in conjunction with the County of Wentworth.

ACTON, ONT.—Tenders will be received up to December 8th, by T. T. Moore, Town Clerk, for the purchase of $3,954.64 pavement debentures.

ALVINSTON, ONT.—A by-law to grant a loan of $3,000 for the establishment for a basket and wooden-ware factory here, has been defeated.

GODERICH, ONT.—It is understood that the Kensington Furniture Company will ask the town for a loan of $25,000 with which to extend their factory.

COLLINGWOOD, ONT. — The Board of Education will ask the City Council for $18,000 with which to erect an eight-roomed school building.

ST. BONIFACE, MAN.—G. A. Rocan, Town Secretary-Treasurer, will receive tenders up to December 20th for the purchase of $100,000 debentures.

GORRIE, ONT. — The Township Council of Howick will probably issue debentures for $30,000 for cement culverts, cement abutments and steel bridges.

DOMINION, N. S. — The Town Council are considering the question of obtaining a water supply and electric light service from the town of Glace Bay, N. S.

POINTE-AU-PIC, QUE.—Joseph Warcen will build a brick residence here to cost $10,000. Plans prepared by Ouellet & Levesque, architects, Quebec, Que.

DESERONTO, ONT. — The ratepayers will be asked for authority to loan the Deseronto Furniture Company $10,000 with which to erect a four storey factory.

PEMBROKE, ONT.—The Council of the United Counties of Stormont, Dundas and Glengarry are having plans prepared for a House of Industry, to cost $20,000.

ST. MARY'S, ONT.—The St. Marys & Western Ontario Railway Company are making application to the Dominion Parliament for extension of time in which to construct their road.

HALIFAX, N. S.—The Liverpool & Milton Railway Company, Ltd., have taken tenders for grading, relaying and ballasting the tracks for the Milton & Liverpool Railway Company.

OWEN SOUND, ONT. — The Owen Sound Bridge & Terminal Co., who are seeking incorporation from the Dominion Government, will construct a bridge over Owen Sound bay.

PRINCE RUPERT, B. C.—N. S. Hoffar, architect, Vancouver, will prepare plans for the erection of several large warehouses, a school, two churches and a number of large dwellings here.

HAMPTON, N. B.—G. W. Vaughan, of this village, W. E. Foster, of St. John, N. B., and others, are seeking incorporation as the St. Martis Railway Co., the authorized capital being $99,000.

HALIFAX, N.S.—The City Engineer is investigating the possibilities of operating a garbage cremating plant as a fuel feeder for an electric lighting station, also the cost of constructing a septic tank.

CORNWALL, ONT.—The Council of the County of Cornwall will borrow $10,000 with which to complete the River Aux Raisin drain, as recommended by W. B. Smellie, C. E., Brockville, Ont.

PETROLIA, ONT.—Tenders will be received by J. W. McDougall up to December 8th for the repair of the Thompson drain; and by F.D. McDonald up to same date for repair of the McCrie drain.

BERLIN, ONT.—The C. H. Westwood Company, Toronto, have amalgamated with the J.B. Gateman Company, and will erect a new building on Cedar street to replace the one recently burned.

ANDOVER, N. B.—Application will be made to the Provincial Parliament for a charter, by the St. John & Grand Falls Electric Railway Co. with power to construct a line from St. John to Fredericton.

DESCHENES, QUE.—The Canadian Pacific Railway have purchased the power plant of the Capital Power Company and it is probale will convert the Pontiac and Pacific Junction Railway to electric traction.

CALGARY, ALTA.—C. P. Taprel has purchased the Alberta Hotel and will erect a large addition to same.—The Majestic Wire Fencing Co., Detroit, Mich., will erect a branch here at a cost of $40,000.

FREDERICTON, N. B.—Tenders will be received by the Department of Public Works up to December 10th for the rebuilding of the Riley Brook bridge, Victoria county, and the Colson bridge, Carleton county.

AMHERSTBURG, ONT.—The ratepayers will be asked for permission to grant concessions to the Canadian Tanners, Limited, in return for which the company agree to erect a two-storey building 40 x 100 ft.

FORT FRANCES, ONT.—The Town Engineer has been instructed to prepare plans and call for tenders for a septic tank. The Town Engineer is asking for quotations on a steam boiler 14 x 60 inches and suitable stack for same.

LONDON, ONT.—The Board of Works have recommended that a by-law be submitted to the ratepayers for permission to extend the sewerage system, at a cost of $50,000. — Smallman & Ingram will build a five-storey block on Dundass street.

WOODSTOCK, ONT.—The County of Oxford is endeavoring to have its by-laws changed in order that it may obtain a share of the good roads fund instituted by the Ontario Government. If the grant is received, about 200 miles of road will be improved.

SASKATOON, SASK.—The Bank o Montreal have purchased land here and intend to erect a building next spring.—Wilson Bros. are about to erect a brick building.—The Hospital Board have accepted the plans of W. W. LaChance for the new hospital.

QUEBEC, QUE.—It is reported that a new theatre will be built here. John E. Turton is interested.—The Quebec & Island of Orleans Railway Co. will apply to the provincial Government for a charter with power to construct a line from Quebec to St. Francois.

PORT ARTHUR, ONT.—The Port Arthur Chronicle has purchased a large site and will erect a three-storey building.—Tenders will be received up to December 31st for all trades required in the erection of a frame dwelling. Plans with A. Clavet, Cumberland street.

HAMILTON, ONT.—The ratepayers will be asked to authorize the expenditure of $30,000 for the erection of a Home for Incurables and $75,000 for an Isolation hospital.—It is reported that the Phillip Carey Mfg. Co. have purchased land here and will erect a branch factory.

BRANDON, MAN.—M. O. Hedley, representing an English cordage company, has acquired a site here and will erect a branch warehouse. — The Brandon Y. M. C. A. have purchased land at Cornelias Point and intend to erect cottages and a large dining hall.

CHANGING FACE PLATES

TAMPING

EVERY OPERATION

With the "IDEAL" Cement Block Machine

is Simple and Rapid

Write for Full Information about the Capacity of the "IDEAL" and its Wide Range

W.H.C.MUSSEN & CO.

MONTREAL

OPENING THE MACHINE

No Cogs
Wheels
Cranks
Chains or
Springs

Face Down
Horizontal Core

READY TO REMOVE BLOCK

VICTORIA, B. C.—The Merchants and the Northern Banks have purchased lots on Yates street on which they intend to erect buildings.—The Majestic Wire Fencing Co., Detroit, Mich., will erect a factory here for the manufacture of concrete reinforcements, to cost over $40,000.

EDMONTON, ALTA. — Tilden-Gurney Co., of Hamilton, Ont., will erect a large warehouse here.—Tenders will be received up to December 15th by John Stocks, Deputy Minister of Public Works, for plumbing, heating and ventilating of the Normal school building at Calgary, Alta.

GUELPH, ONT.—It is understood that an addition will be made to the Guelph Agricultural College, to cost $15,000.—The Board of Health have recommended the erection of a consumptive hospital.—The Guelph Glazing Co. have acquired the factory which was recently occupied by Carter & Co. and will remodel same.

NEW WESTMINSTER, B. C.—A site has been acquired on which a gymnasium will be erected.—A. Hardman has purchased a site at the corner of Victoria and McKenzie streets and will erect a block thereon.—The Crystal Glass Co. have purchased the building of the Automatic Can Co. and will make alterations at once.

SELKIRK, MAN.—Tenders are being taken up to December 6th by Thomas Partington, Town Secretary-Treasurer, for excavating, laying of water mains, supplying vitrified sewer pipe, and constructing concrete sewers, manholes, and catch basins.—A by-law will shortly be submitted n the question of installing a municipal telephone system.

PRINCE ALBERT, SASK.—George Dangerfield has purchased a site here for a new hotel to cost $40,000.—Charles Stacey has purchased the Royal Hotel. He will make some alterations at once and intends to erect a more modern structure on the property next spring.—It is reported that brick blocks will be erected here next spring by G. W. Baker, Andrew Stewart, S. McLeod and Mrs. Bowler.

SASKATOON, SASK.—A large warehouse is to be erected here next year for the use of the Manson, Campbell Company and Chatham Carriage Works, both of Chatham, Ont.—The Town Council are condsidering the establishment of an incinerator plant, in which case debentures for $25,000 will be issued.—The Bank of Montreal have purchased a site corner Twenty-second street and Second Ave., on which they purpose erecting a building.

TORONTO JUNCTION, ONT. — The following permits have been issued: John Colvin, two and a half storey brick dwelling, Keele street south, cost $2,800; John Drummer, two one and a half storey brick dwellings, Keele street south, cost $5,200; Joseph Edwards, two storey brick dwelling, Uxbridge avenue, cost $1,800; A. McGill, two and a half storey brick and stone residence, Keele street south, cost $2,500; W. Preston, two and a half storey brick and stone residence, Keele street south, cost $2,500.

PETERBORO, ONT.—A concrete dam will be built at Lovesick Lake next spring.—It is reported that the Crossley Carpet Co. will establish a branch here.—The Board of Trade have recommended that the City Council consider the question of installing a filtration system.—Deputations from the townships of Drummer and Douro recently waited on the City Council seeking a grant for the building of a bridge over the river at Warsaw.—A by-law will be submitted to the ratepayers to provide money for making permanent the bridges on Brock, Reid, Kean and Dalhousie streets, and also for the construction of the trunk sewer from Smith to Dover streets.

VANCOUVER, B. C.—A bridge is to be constructed across the Squamish river by the Provincial Government to cost $7000.—T. K. Shand, architect, has prepared plans for an eight-storey and basement reinforced concrete block to be erected on Hastings street, between Westminster and Gore avenues. The building will be occupied by a departmental store, the promoters of which are Vancouver and St. Paul capitalists. The details of the building are at present withheld.—Cavanaugh & Holden have prepared plans for a three-storey block on Westminister avenue.—L. H. Cohn, representing a local syndicate, has had plans prepared for a roller skating rink on Pender street, cost $40,000.—The Burrard-Westminster Boundary Railway & Navigation Co. are seeking incorporation with power to construct several lines in British Columbia.—By-laws have been passed authorizing the expenditure of $60,000 for a public market and $40,000 for an incinerator.—It is reported that the Canadian Pacific Railway will erect a new station.

OTTAWA, ONT.—Tenders will be received by F. Gourdeau, Deputy Minister of Marine and Fisheries, up to December 10th, for steel plates and shapes required for the construction of a dipper dredge. Specifications at the offices of the above department, their agents at Montreal, or G. J. Desbarats, Director of the Government ship yard, Sorel Que.—Tenders will be received by F. Gelinas, Department of Public Works, up to December 17th for construction of landing piers at Lambton and Coleraine in Lake St. Francis, Que. Plans with J. L. Michaud, engineer, Merchants Bank Bldg., Montreal, and Postmaster at Lambton, Que. — The Quinze & Blanche River Railway Co. are seeking incorporation from the Dominion Parliament to construct a road from a point in the township of Dymond to Quinze Lake, Que., Perkins, Fraser & Gibson, Ottawa, Ont., solicitors for the applicants.—The Midway & Vernon Railway Co. are applying to the Dominion Parliament for an extension of time in which to complete their road —The City Engineer has estimated the cost of a municipal paving plant at $16,000.—The Civic Electric Commission will submit a by-law to the ratepayers for authority to to borrow $500,000 for the purchase and development of a power plant.—F. R. Heakes, provincial architect, is about to prepare plans for alterations to the Normal school building in this city.

WINNIPEG, MAN.—The ratepayers will be asked to vote on the question of installing a municipal telephone system.—J. H. Agnew, Provincial Treasurer, will receive tenders up to December 20th, for the purchase of $274,000 drainage debentures.—The Board of Works have recommended that tenders be called for the following impovements: Sewers, Quelch street, from Logan to Irish avenues, cost $2,515; Alfred avenue, from McGregor to McKenzie streets, cost $1,367; Catharine avenue, from Quelch street to C. P. R. tracks, cost $1,786; Steward, Bird Hills road and Poplar avenue, from Red River to Montcalm street, cost $72,000; cedor block pavement on a lane north of Portage avenue, from Hargrave to Edmonton streets, cost $1,786.—The Board of Works have recommended the following improvements: Asphalt pavements; Dromore street, from Harrow to Cambridge streets, cost $13,303; Ethel avenue, from Harrow to Cambridge streets, cost $15125; Harrow St. from Wardlaw avenue to Wellington crescent, cost $20,395; Sewer in Eccles street, from Florence to Morley avenue, cost $4,880.—The Northwest Fire Underwriters' Association have written the City Council recommending the following improvements: The purchase of a 5 million gallon centrifugal pump with seperate motor; the laying of several mains, the removal of all electrical machinery from the pump house, and the building of four additional fire tanks.—H. B. Rugh, architect, will receive tenders up to December 3rd for erection and completion of a warehouse for the Fairchilds Company, Limited.—C. J. Brown, City Clerk, will receive tenders up to December 31st for water pipe, specials of various sizes, gates and hydrants for extension of the high pressure system.—The City Engineer has recommended the purchase of new asphalt plant, estimated cost $25,000.

MONTREAL, QUE. — The Water Committee have recommended the expenditure of $2,000,000 to extend the waterworks system.—The Roman Catholic School Board have been notified to erect fire escapes on all their buildings.—Tenders will be received by L.O. David, City Clerk, up to December 7th for license and vehicle numbers, badges, etc.—The Manitoba & Northwestern Railway Co. are applying to the Dominion Government for authority to construct a branch line from Theodore, Sask., to a junction with the Quills Lake branch.—G. Fraser, representing several capitalists, is considering the erection of a car wheel plant at Longue Pointe.—It is reported that the Knox church and Y. M. C. A. property is about to be sold to a concern who intend to erect a large hotel.—The following permits were issued last week: O. & F. Prouix, 12 dwellings, Gilford, cost $8,400; B. Bayte, 2 dwellings, St. Andre, cost $2,000; B. Forget, 6 dwellings, Gain, cost $6,000; N. Racine, three dwellings, Moreau, cost $3,400; N. Vechard, three dwellings, Moreau, cost $3,400; J. Lebourneau, two dwellings, Chambord, cost $1,800; Dr. Bernier, two dwellings, Ontario east, cost $4,000; J. O. Gagnon, eight dwellings, Aylwin, cost $5,000; A. Gregoire, two dwellings, St. Hubert, cost $2,000; Benoit & Fils, three dwellings, St. Hubert, cost $6,500 and L. Lamoureaux, four dwellings, Darion, cost $3,000.—The Calgary & Edmonton Railway Co. are applying to the Dominion Parliament for authority to construct a branch line in Alberta.—The Manitoba & Northwestern Railway Co. are applying to the Dominion Government for

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ESTIMATES FURNISHED

authority to construct a branch line from Bredenbury to a point near Kamsack.—The Canadian Pacific Railway will not proceed with the extension of the Windsor street station for some time. Plans have been prepared for a larger structure to cost $2,000,000.

TORONTO, ONT. — Tenders are wanted at 165 Queen street west for plastering.—Tenders have been taken by R. J. Edwards, architect, 18 Toronto street, for excavating for the foundation of an apartment house on Spadina avenue.—The following asphalt roadways are to be laid by the City: Shanly street, from Salem avenue to Dufferin street, cost $5,367; Lennox street, from Bathurst street to Manning avenue, cost $7,024; Portland street, from King to Queen streets, cost $6,698.—It is reported that a Montreal syndicate has purchased land on Adelaide street west of Bay and intend to erect thereon buildings valued at over $1,500,000. Francis & Wardrope acted as solicitors in the real estate transaction.—The City Engineer has recommended the following works: Asphalt pavements, Yarmouth road, from Miles Place to Shaw street, cost $3,618; Leslie street, from Queen to Gerrard streets, cost $14,318; Russett avenue, from Bloor street 987 feet north, cost $9,724; Palmerston avenue, from Barton to Fallis streets, cost $3,859; Logan avenue, from Gerrard to Bain streets, cost $11,791; Delaware avenue from Stanley to Hallam streets, cost $7,094; Yarmouth road, from Manning avenue to Christie street, cost $3,836; concrete sidewalks: Perth Ave., from Boyce to Wallace Ave., cost $1,887; Lucas St., from Sorauren to Roncesvalles avennes, cost $1,192; Pape avenue, from Bain to Danforth avenues, cost $2,924; Binscarth road, from Glen road 1131 feet east, cost $1,827; Logan avenue, from

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Heward avenue 193 feet east, cost $1,967.—The Monarch Bank of Canada have purchased the premises of Rice, Lewis & Sons, Limited, and it is reported that they will remodel the structure into an office building.—Tenders will be received up to December 17th by the Chairman of the Board of Control for the erection of a grandstand and horticultural building. Plans with G. W. Gouinlock, architect.—Plans have been adopted for alterations in the Canadian Pacific Railway building, corner King and Yonge streets to cost $10,000.—F. H. Herbert, architect, has prepared plans for a warehouse for Edmanston, Bates & Co. to be built at corner of Duncan and Adelaide streets.—Tenders are wanted at 77 Victoria street for brick and carpenter work and excavating. — The County of York will erect a new school house in section No. 20 and will issue debentures for twenty thousand dollars to cover the cost of same.—It is understood that plans have been prepared for the proposed addition to the Confederation Life Building, and that the work is likely to be proceeded with at an early date.—The Board of Education have decided to expropriate five acres of property at the corner of Bloor street and Brunswick avenue upon which to erect the new Technical School.—It is understood that part of the congregation of Balmy Beach Pavilion church will erect an edifice on the corner of Birch avenue and Queen street. —The selection of the architect for the new General Hospital has not yet been made. At present the names of three firms are under consideration.—Z. A. Lash, solicitor, on behalf of the Canadian Northern Railway Co., is applying to the Dominion Government for extension of time in which to construct the branches of this road.—The Huron & Ontario Railway Co. are seeking permission of the Goverment for power to build two branch lines in Ontario.—The following building permits have been issued: Moses Moses, pair semi-detached 2 storey and attic brick dwellings, Wright avenue, near Sorauren avenue., cost $3,800; John Marr, two detached 1½ storey brick stables, Conduit street, near Willoughby street, cost $1,800; John Marr, three detached 2½ storey brick dwellings, Conduit street, cost $3,000; L. C. Sheppard, three attached 2½ storey brick dwellings, Ontario street, cost $7,000; George Vaughan, pair semi-detached 2 storey brick dwellings, Dundas street, cost $4,000; L. C. Sheppard, 6 pair semi-detached 2 storey brick dwellings, Olive avenue, cost $24,000; Wm. Adshead, pair semi-detached 2 storey roughcast dwellings, Dupont street, cost $2,000; J. Anderson, pair semi-detached 2 storey and attic brick dwellings, 17-19 Woolfrey avenue, cost $4,400; T. Eaton Co., Ltd., 1 storey addition to factory on Albert street, cost $4,000; L.C. Sheppard, 12 pair semi-detached 2½ storey brick dwellings, Crawford street, cost $54,000; L. C. Sheppard, 3 attached 2 storey brick dwellings, Hillsburg avenue, cost $6,000; Leigh Todd, 2 storey and basement stone and brick dwelling, Emerson avenue, cost $2,500; B. Panter, 3 storey and basement brick apartment house, Broadway place, cost 6,500; A H. Moore, 3 storey brick store and dwelling, Bloor street and St. Clarens avenue, cost $5,000; E. Heyward, 2 storey brick stable and storage shed, 807 Yonge street, cost $2,000; Love Bros., pair semi-detached 2 storey roughcast dwellings, brick fronts, Gerrard street, cost $2,400; W.H. Bessey, 2-storey roughcast dwelling, brick front, 274 Booth avenue, cost $2,000; R. Robson, pair semi-detached 2 storey roughcast dwellings, brick fronts, Dufferin street, cost $2,750; Love Bros., 2 pair semi-detached 2 storey roughcast dwellings, brick fronts, Gerrard street, $6,000; S. B. Coon, 2½ storey brick dwelling, Roxborough street west, cost $5,500; R. W. Harrison, 6 attached 3 storey brick stores and dwellings, Bathurst street, cost $18,000; R. W. Harrison, 2 pair semi-detached 2 storey brick dwellings, Seaton square and Palmerston avenue, cost $4,000; James McGrath, 3 storey brick hotel, Sheridan avenue and Dundas street, cost $10,000; J. A. Alexander, 2 storey and attic brick dwelling, 173 Roxboro street west, cost $3,500; C. E. Walton, 2 storey frame dwelling 59 Leuty avenue, cost $2,200; Gerhard Heintzman, 5 storey brick factory, Sherbourne street, cost $20,000; B. H. Morehouse, 3 attached 2 storey, brick veneer fronts, roughcast dwellings, Langley avenue, cost $5,400; John Dunlop, 2 story brick dwelling, 93 Dovercourt road, cost $3,000.

AWARDED.

MIMICO, ONT.—Erection of a hotel: W. F. Young, contractor.

PORT ARTHUR, ONT. — Clearing and grading of Munro street: Arthur Mauro, contractor.

NIAGARA FALLS, ONT. —$73,000 debentures awarded to Wood, Gundy & Company, Toronto.

HAMILTON, ONT. —250 boulevard lamps for street lighting: American Street Lighting Company.

NORTH BATTLEFORD, SASK.—Fire engine with two 75 gallon cylinders: Waterous Engine Works Co., Brantford, Ont., successful tenderers at $775.

PUGWASH, N. S.—Construction of an eight mile section of the Grand Trunk Pacific Railway in Quebec: R. L. McDonald and A. Smith, of this town, contractors.

BROCKVILLE, ONT. — The James Smart Manufacturing Co. have been awarded the contract for heating and ventilating the public school at Winchester Springs, Ont.

WINNIPEG, MAN.—Water pipe and specials: Camden Iron Works, Philadelphia, Pa., successful tenderers at $45,949. —Construction of steel shed over C. P. R tracks: The Dominion Bridge Company Montreal, Que., successful tenderers.

VANCOUVER, B. C.—Building for the Canadian Bank of Commerce: Kelly Bros. & Mitchell, contractors.—Stone for the Canadian Bank of Commerce building: Northern Construction Company, Nanimo, B. C., successful tenderers.—Erection of a mill for Vancouver Milling and Grain Company: Smith & Sherburne, Vancouver, B. C., contractors.

TORONTO, ONT.—The contracts for city supplies have been awarded as follows: Broken stone, Rogers & Co., $1.27 per ton; sand, delivered west of Simcoe street, Joseph Gaby, 89 cents per cubic yard; sand, east of Simcoe street, Sand & Dredging Co., Ltd., 95 cents per cubic yard; lumber, pine, Reid & Co., $26.97 per thousand feet. Hemlock, $21.47, with figure varying for different sizes; pine, Arthur Bryce & Co., 12x12x20 timbers, $31, hemlock $36; cedar paving posts, Reid & Co., 19¼ cents per post; pine scantling, Reid & Co., $24.97; cedar scantling, $21.97; stop valves, Canadian Fairbanks Co., different sizes, from $8 to $42.66; lead pipe, L and M, Samuel Benjamin & Co., all sizes, at $5.97 per cwt.; brass and bronze fittings, Canada Metal Co., bronze, 28 cents and 30 cents per lb., brass castings, 25 cents, babbitt, 12 cents; lumber, plank, Arthur Bryce & Co., $25 per M, and boards at same price; pine or white cedar planks, Bryce & Co., $27.

BIDS.

LISTOWEL, ONT. — The following firms have tendered for the construction of four bridges for the town: Nagle & Looty, Dublin, Ont; C. H. Clemens, Platsville, Ont.; Brantford Building & Paving Co., Brantford, Ont., and Fraser & Eichler, New Hamburg, Ont. The tenders were referred to a committee to report.

FIRES.

Stores of the Bowman Lumber Company at Comaplix, B. C., loss $15,000.—Warehouse of the United Factories, Limited, Toronto, Ont., loss $30,000.—Union Supply Co.'s building, Rosthern, Sask., loss $15,000 — Building of the Northwestern Fur Manufacturing Co., Montreal, Que., loss $5,000.—Methodist church at Thorold, Ont., damaged to extent of $1,000.—Stables of the Imperial Hotel, New Hamburg, Ont., loss $3,000. —McArthur Block and adjoining buildings, Sturgeon Falls, Ont., loss $40,000. —Moulding and glazing rooms of Robertson & Hackett's mill, Vancouver, B. C., loss $60,000.

Word has been received of the death of R. M. Thompson, clerk and solicitor for the town of Blenheim, Ont. Deceased was on a shooting expedition when he met his death.

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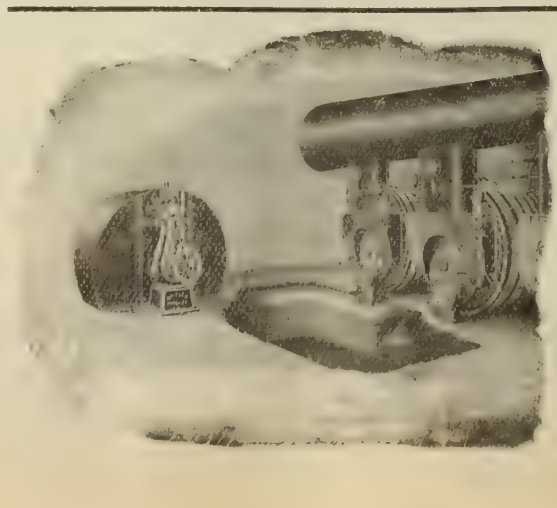

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Building permits for 402 buildings, having a value of $1,087,692, were issued during November by the city of Toronto. For the same period last year the figures were 238 buildings valued at $788,771. The eleven months ending November 30th saw 3288 permits issued for the erection of 4,487 structures at a cost of $12,190,615, while for the same eleven months of 1905, 2933 buildings were erected costing $9,743,560.

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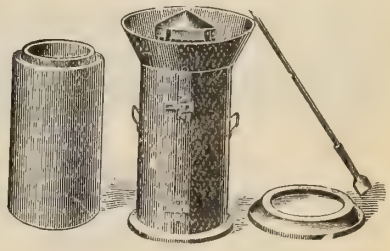

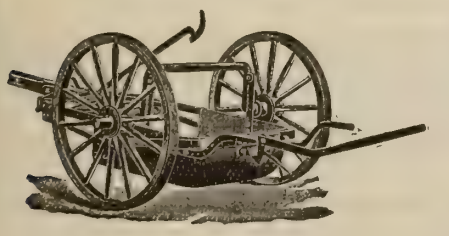

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A VETERAN CIVIL ENGINEER.

The late Colonel Henry Strange, who recently died at Rockwood, Ont., in his 92nd year, was probably the oldest civil engineer in America. He was born in Demerara, West Indies, September 16, 1815, and educated in England, coming to Canada in 1834. He built and occupied for many years the historic building in Guelph known as "The Priory," and for some years past used as the C.P.R. station. He surveyed the G.T.R. from Toronto to Sarnia, and was chief engineer in surveying the

THE LATE HENRY STRANGE.

Great Western division of the G. T. R. He also surveyed the first railway laid in Michigan, and even since his nineteenth birthday surveyed quite a large property in Rockwood for Mr. Harvey of Guelph.

RAPID SEWER CONSTRUCTION.

The Taylor Construction Company's big trenching machine, leased from the Municipal Trenching Company, Montreal, J. W. Harris, President, is working on the Fifth avenue sewer, breaking all previous records for sewer construction in Edmonton at least if not in Canada.

Yesterday they trenched and laved tile for 312 feet of sewer, and today the machine was put on to the high speed and made 330 feet, notwithstanding that over two hours was lost in the morning half of the shift, on account of a delay waiting for fuel. In the five hours from 1 o'clock until 6 p.m. 200 feet of sewer was laid. This figures out to 40 feet an hour or one foot in every 90 seconds. The ground on Second street is standing up beautifully and that part of the contract will be finished by Friday afternoon.

The Taylor Company intends to move the machine over to the First street section of the contract and commence work there on Monday. According to the work that the machine is now doing, they figure that they will do 100 feet of work a day, making a trench five feet wide by twenty feet deep. Two shifts will be kept on the concreting work in order to keep up with the machine. Sixty men will be employed on the machine and concrete work.—Edmonton Daily Bulletin.

Mr. John Aldridge, retired builder, Toronto, will be an Aldermanic candidate at the next municipal election.

The death occurred recently at Barre Plains, Mass., of John Reid, a native of Mount Thom, Pictou County, N.S. The late Mr. Reid was for many years in the construction department of the Ware River Railway.

Word comes from Kankakee, Ill., of the death of Mr. W. McGillis. Deceased was born in Glengarry, Ont., 68 years ago, and was at one time connected with the Grand Trunk Railway. In 1858 he moved to Kankakee, where he has carried on a very extensive railway contracting business.

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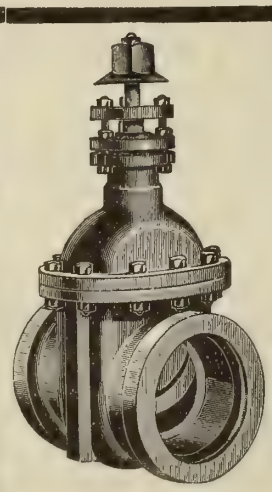

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Notes on the Septic Tank Process of Sewage Purification

By W. R. Butler. M. Can. Soc. C. E.

(Continued from last issue.)

The first large city to adopt it for the sewage of its entire population was Exeter itself, with a population of 47,000, and the larger installation was opened a little over three years ago. Its example has been followed by the installation of hundreds of similar works in English cities, towns and villages; in the principal European countries, in India, in many of the Colonies, in the United States, and lately in Canada.

Without following minutely Mr. Cameron's experimental work during six years of investigation, it may be sufficient, for the purpose of this paper, to outline the process and to give a summary of results.

In obedience to the principle already referred to, the crude sewage was admitted directly into a large air-tight tank (the inlet being below the water line), without any preliminary effort to separate the solids in suspension, and trusting entirely to anaerobic bacterial agency for their decomposition and liquefaction; the tank was furnished with a glass inspection chamber, by means of which whatever visible action or movement went on within the body of the fluid was capable of observation, and much was learned in this way respecting positions of the zones of maximum activity in decomposition, and the mode of disengagement of the gases liberated.

After retention within the tank for a period providing for an extremely slow movement of the fluid from end to end, it was discharged by a special form of outlet, placed below the surface, and designed to promote uniform but imperceptible movement of the entire volume flowing, the reception and discharge being continuous; aeration of the tank effluent was then secured by passage over a weir to a set of beds of filtering material, so arranged as to be charged with the fluid periodically only; each bed being allowed to remain empty for an interval long enough for complete aeration of its pores and interstices; the processes of alternately charging and emptying these filter beds were allowed to take place gradually, and mechanical arrangements were made for uniform distribution of the tank effluent within the body of the filter.

It had already been found by Mr. Dibdin, in his experiments with London sewage, that the only essential to ensure the continued efficient working of a properly-constructed ærobic sewage filter, and to prevent the clogging of its pores, was the regular period of rest and aeration already alluded to.

A recollection of the principles which we have outlined will show that conditions were in this way provided in the Exeter tank and filter beds, respectively, favourable to it "Anærobic," succeeded by "Aerobic" bacterial activity. In the tank, oxygen (essential to the life of the organisms aforesaid), is only found in a combined state, and the consequence of its abstraction is the breaking down of the organic matter in suspension and the liberation of such constituents as we have mentioned, the process being largely that of putrefactive decomposition; the subsequent passage of the tank effluent over the particles and through the interstices of the filtering material in thin films, and in the presence of air absorbed by the filter, brings it (under ærobic conditions), within the operations of such organisms as may be present, the result of which will be active nitrification. The Exeter installation showed that these conditions once established, and maintained in the way described, a purification of the most satisfactory character continued without interruption.

Mr. Cameron's observations through the six years probation of the method would make a long story to repeat; they showed him, however, how to apportion the times of the different stages, so as to obtain the best results, and they revealed a great many surprising and extremely interesting facts which form the basis to-day of the practical application of the Septic Tank Process.

An essential requirement is, of course, to limit putrefactive decomposition, as far as possible, to the period of sojourn by the fluid within the air-tight tank, and a very general pratice now with ordinary domestic sewage is to so suit the arrangements and dimensions of the tank as to lead to the passage through it, without any perceptible current, of one day's sewage in something less than 24 hours, so that its liquid contents are once completely changed within that period. The tank effluent itself exhibits a marked purification, the extent of which will be referred to later on. For direct æration (at first thought to be an essential), the tank effluent was originally made to pass in thin sheets over a weir, or along a channel towards the filters. This is seldom now done as it has been practically shown to be unnecessary. The filters, to which the tank effluent now passes, are so arranged as to admit of the following sequence at each filter: (1), A period of filling; (2), a period of remaining full; (3), a period of empting; (4), a period of standing empty; each of these periods, it is found, should occupy from 1½ to 3 hours, according to the particular type of sewage to be dealt with.

The additional purification exhibed by the filtrate, over the tank effluent, is referred to below.

On the occasion of one of the author's visits to the Exeter experimental works, he had the opportunity of catching this effluent filtrate as it is discharged, a clear and odourless liquid. Not two hundred feet away the crude sewage was entering the tank, the embodiment of all that was objectionable.

One of the most surprising things, under the circumstances, is the very slight accumulation of solid matter that occurs in the form of sediment in the tank itself; it has been conclusively shown that the whole of the solid organic matter in suspension is, with proper management, capable of liquefaction by biological agency, sooner or later, and such sediment as necessarily remains is of a purely mineral or humoid character.

The quantity of sediment found in the experimental tank at Exeter, after a year's working, implied a decomposition of no less than 20 grains of solid organic matter for every gallon treated; the residue remaining in the tank being only about 4½ grains per gallon, and the tank was in operation continuously for five years without the slightest necessity arising for any removal of sediment. As is pointed out by Mr. Cameron in one of his papers on the subject, had the solids in suspension in this example been precipitated in the form of sewage sludge, they would have produced each year over 550 cubic yards of 90% sewage sludge—an extraordinary testimony to the scale of results attainable by these legions of tiny invisible workers.

With regard to the material used in the filter beds, experience has shown that efficiency depends more upon its mechanical condition than upon its mineral characteristics; the action that goes on is purely biological, and the essentials are a suitable habitat for the organism, a sphere for its activity, and properly-regulated supplies of food and air. Coke breeze, or crushed furnace slag, for filtering material answer perhaps the best. It will be recognized that the arrangements incidental to all that has been told, viz: The regulation of the inflow and outflow of sewage to the septic tank, the periodic admission and discharge at filters, etc., necessitated close personal supervision and attention; to obviate these necessities, and to ensure regularity, Mr. Cameron and his associates (Messrs. Commin and Martin), were led to the contrivance of various mechanical devices, by means of which the entire process was made automatic, and by means of these contrivances the larger in-

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stallation, afterwards completed for dealing with the whole sewage of Exeter and extending over 2½ acres, is now overseen by two men, the principal duties of whom are confined to the simple care of ensuring working order in the automatic gear controlling the various discharge valves, etc.

It should be stated that the comparative absence of putrefactive decomposition at the filter beds prevents the creation of a nuisance. The experimental works at Exeter, and the subsequent larger installation, are situated in a bit of low ground bordering the river Exe, and immediately below a residential district. No complaint arises of nuisance to neighboring residents, and, as the author can personally testify, little that is unpleasant can be detected, either at these works themselves, or at the many other installations of the same type with which he is more or less familiar.

The gas generated in the hermetically sealed tank sometimes exists under a certain pressure, which is, however, very variable; a typical analysis of gases thus present may be quoted as follows:—CO_2, 0.30%; CH_4, 20.3%; H, 18.2%; N, 61.2%; its composition is, of course, very variable, but the large percentages of methane (marsh gas), and free hydrogen, indicate high inflammability, and it is a most interesting fact that, by means of an incandescent mantle, these gases, of heat producing but feeble illuminating power, have been used at Exeter (and probably elsewhere), for lighting the works at night. Some idea of the degree of purification that may be expected may be obtained from quotations of the most significant features of analysis, made of both tank effluent and filtrate, respectively, at one or two installations now in operation.

FROM AN INSTALLATION AT BARHEAD, SCOTLAND.

	Parts in 100,000		
	Crude Sewage.	Tank Effluent.	Filtrate.
Organic and volatile matter in solution	10.86	11.35	2.740
Albuminoid ammonia	0.30	0.34	0.052
Total ammonia . . .	2.93	2.95	0.866
Nitrogen as nitrates and nitrites	nil	nil	0.918
Oxygen absorbed by organic matter . . .	2.83	3.06	0.670
Color (Loch Katrine water=10)	25	20	7

Total purification shown in filtrate as compared with tank effluent, judged by albuminoid ammonia = 84.7%; or judged by oxygen absorbed, 78%.

Analysis at experimental test installations at Manchester and Leeds show 85% to 87% albuminous purification, and 89% to 93% purification as judged by oxygen absorbed, with a purification of tank effluent over crude sewage rising to over 60%.

Analysis of results from an installation at Yeovil (a town producing, through its particular industries, a sewage of unusual foulness and complexity), give averages about as follows:—

Tank effluent, as compared with crude sewage, 64.8% purification.

Filtrate effluent, as compared with crude sewage, 87% purification.

The Exeter filtrates were stated, in a report by Mr. Dibdin, to be in a condition rendering them fit for discharge into a stream or river of relatively small volume; and as showing no signs of putrefaction or offensive secondary decomposition on keeping.

Analysis of the results of the process are embodied in reports by many of the foremost chemists in the kingdom; Mr. Dibdin, Dr. Rideal, Mr. G. J. Fowler, chemist to The Rivers Committee of The Manchester Corporation, and others; from some of which the above figures have been selected; they all indicate the production, in the filtrate, of a highly nitrified effluent, rich in dissolved oxygen (the nitrates often exceeding one part per 100,000) —these characteristics prove permanence in the purification effected, and absence of liability to the putrefaction which may follow mere temporary sterilization.

In a nitrified effluent, oxidation of any organic matter present will be continued even after contact with the filters may have ceased; indeed, it has been proved at Manchester that the filtrate improves the state of the water in the Manchester ship canal into which it is discharged, and that the addition of it, in equal parts, is sufficient to arrest a putrefaction in the latter, which takes place when it is kept without any such admixture.

Even in the tank effluent we have a purification comparable with that effected by any chemical or precipitation processes, without the accompanying difficulties due to the "Sewage sludge."

The scope of the present paper does not admit of the discussion of minor variations in method of treatment, dictated by variations in character of sewage, and in climatic influences;—a very wide experience, during the past ten years, has certainly proved that the septic tank and the contact beds are together equal to dealing with sewage of the worst types, and their efficacy has been tested under the greatest variations in climate.

The author has had, perhaps, some special opportunities of following the development of the process from its incipiency, through a personal acquaintance with Mr. Cameron and some of those associated with him, and he has been able to visit a number of works in operation; it is his belief that in its application will lie the means of dealing with the sewage disposal difficulties, yearly becoming more acute in so many Canadian towns and villages, especially those of the lake districts, where contamination of water supply is becoming increasingly serious in its consequences. In this connection it may be added that experiments conducted some time ago by Dr. Ransom Pickard, F.R.C.S., aiming at comparisons of percentages of typhoid bacilli present after the addition of typhoid bacillus cultures to crude sewage untreated, and to sewage afterwards submitted to the septic tank and contact beds process, admitted of the preparation of the following table, taken from Dr. Pickard's report upon the subject.

Results of addition of Cultures of Typhoid Bacilli to Crude Sewage taken from the Exeter Installation:

On the elapse of	% Typhoid Baccilli present
0 hours	100.
24 "	76.14
48 "	60.55
7 days	8.16
14 "	0.73

The application, to the same infected sewage, of the septic tank and biological filter process, as carried out in Dr. Pickard's laboratory, indicated a speedy removal, by tank and filter, of a fair 90% of the bacilli; with the result, moreover, that of the bacilli passing from the biological filter, in successive periodic filtrations, subsequent to the first contamination of the crude sewage, the second filtration showed but 1.41%, and the third is given as 0.491%.

A doubt would naturally arise respecting the maintenance of efficient action of contact beds in the face of the extreme cold of a Canadian winter. As before stated, it is but comparatively lately that information on this point has been forthcoming. Respecting some of the experiences gained on this continent, the writer can speak personally.

Towards the end of the very severe winter of 1903-4, he received an invitation from the American Cameron Septic Tank Company to visit certain of their installations in Northern Illinois and Iowa, for the purpose of making enquiry respecting their operation during that season; amongst other visits, one was paid to a plant in the neighborhood of Davenport, Iowa. The winter had been phenomenally severe, and at Davenport, at the time of the visit, ice was reported upon adjacent parts of the Mississippi river exceeding 30 inches in thickness. The mean temperature at the place, for January and February, was not as high as 17° F, the mean of minimum temperatures for the same period was barely 9° F, yet the author was assured by the attendant that no ice formed upon the contact beds which was not immediately dissipated by the next charge of sewage, and that the heat of the sewage itself proved quite sufficient to prevent any failure in the action of the alternating valve gear, which, in installations exposed to a severe winter, it is the custom of this company so to place as to receive the effect of radiant heat from the comparatively high temperature sewage. The author, on the occasion of his visit, collected some of the filtrate as it was dis-

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Buffalo Forge Co. 4

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DRILLING CONTRACTORS
Page
Harvey, J. 20
Peat & Sons, James 14

DEBENTURES
Nay, Anderson & Co. 22
Stimson & Co., G. A. 21

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charged ;—it exhibited a very slight odour at the time, but proved sufficiently nitrified to afterwards completely purify itself, and it is still in his possession—a clear and odourless liquid remarkably free from sediment.

Under extreme cold it may, perhaps, be necessary, with contact beds of large surface, to resort to the expedient of forming an undulating or ridged surface, so that dissipation of an ice film may be assisted by its fracture under its own weight on settlement.

In temperate climates, the sewage is generally distributed over the surface of contact beds by means of open channels, but the American Septic Tank Company has found it better in northern latitudes to use porous ducts, or pipes with open joints, laid just beneath the surface of the bed.

This paper should not be closed without some general remarks upon the cost of the process, which must necessarily vary with locality and population, nature of sewage to be dealt with, etc., etc. As to capital expenditure, limits in Canada may perhaps be safely stated of $3.50 per capita for populations of 40,000 to 50,000; to $12.00 per capita, under somewhat extreme conditions and for small communities.

In cases of almost any chemical or mechanical purification methods, working expenses, disposal of sludge, etc., etc., lead to a very considerable annual expenditure, easily rising to 10% upon capital outlay, even with large installations; and a highly-important feature of the Septic Tank Process is its practical solution of the sewage sludge problem and the consequently low annual expense involved.

Apart from this, however, it is clearly a process for which nature has made direct provision, and in which the observance and co-operation of natural laws are the only requirements; it has been abundantly verified that careful design, in which due regard is paid to character of sewage, regularity or irregularity of flow, influences of climate, etc., etc., together with very slight but intelligent oversight, are sufficient to produce and maintain conditions necessary to the operations of these wonderful laws and activities provided for so beneficent a purpose.

It must be observed that a tank, and its associated contact beds, do not immediately develop their full biological efficiency; the development of organic life, to an extent necessary to deal with the volume of sewage flowing, requires time in both tank and filters. In the former, a scum of varying thickness is found to accumulate upon the surface, and it is essential that this be not disturbed (a reason, amongst others, for submerged inlet and outlet); this scum abounds with bacteria and is, perhaps, their principal home

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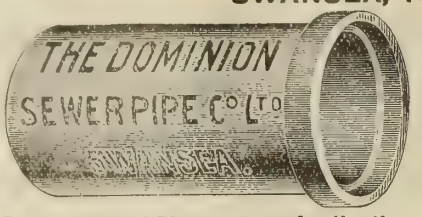

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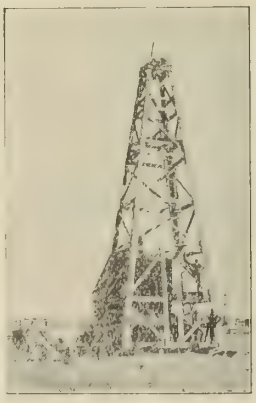

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In preparing these notes the author is largely indebted to the reports and writings of many whose names are mentioned in the paper, those of Dr. Thudicum, Dr. Simms Woodhead, and others.

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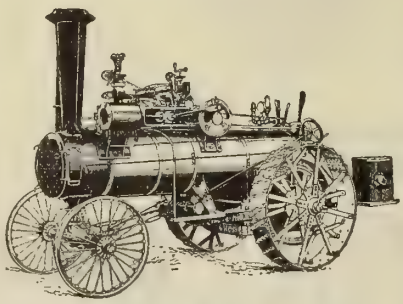
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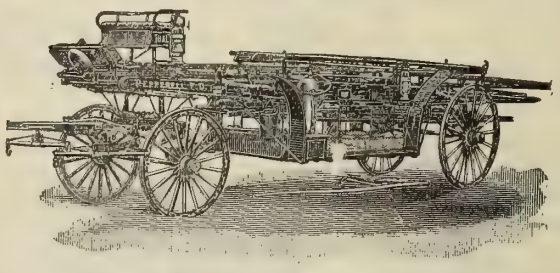
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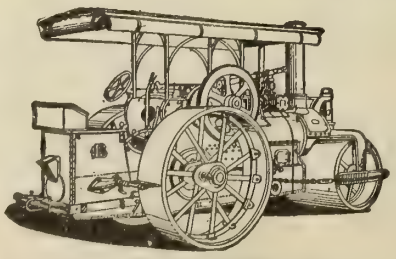
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							Neat.					3 (Sand) to 1 (Cement)				
					Initial	Final	1 dy.	7 dys.	28 dys.	3 mos.	1 yr.	1 dy.	7 dys.	28 dys.	3 mos.	1 yr.
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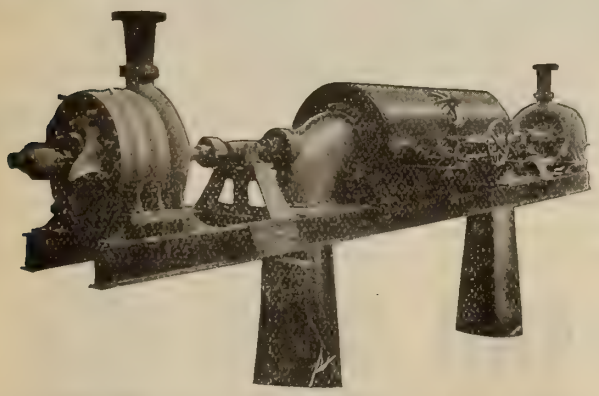

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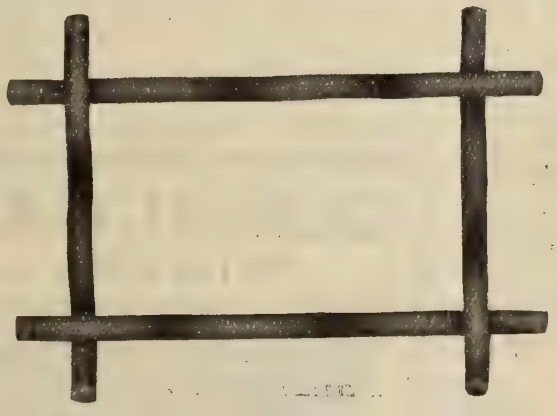

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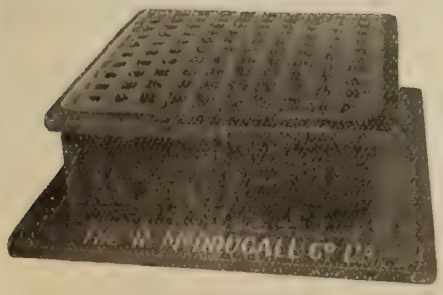

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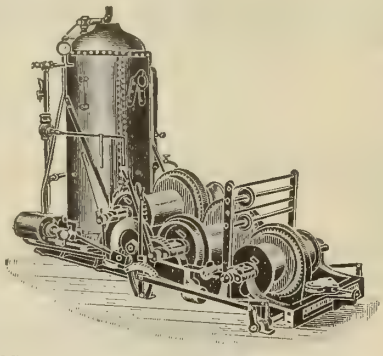

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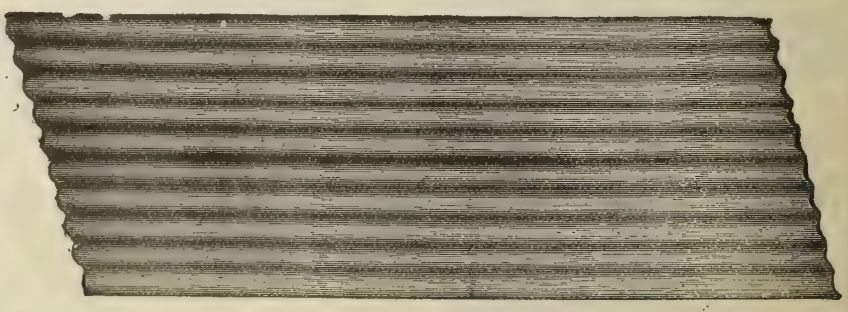

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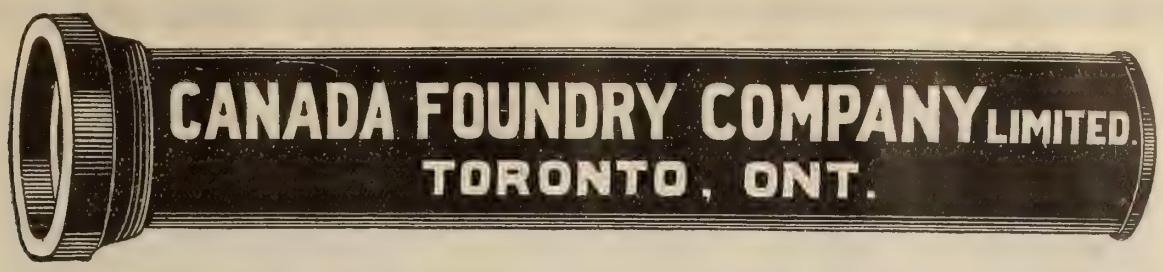

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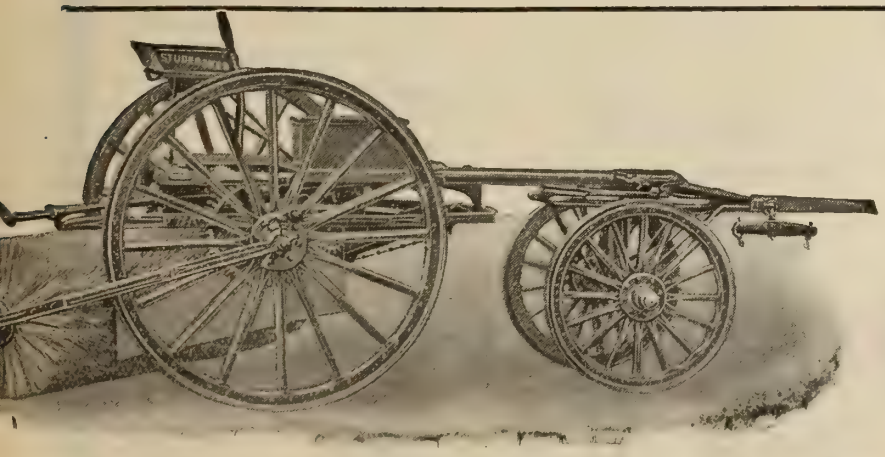

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Does not clog or get out of order. Greatest width of spray
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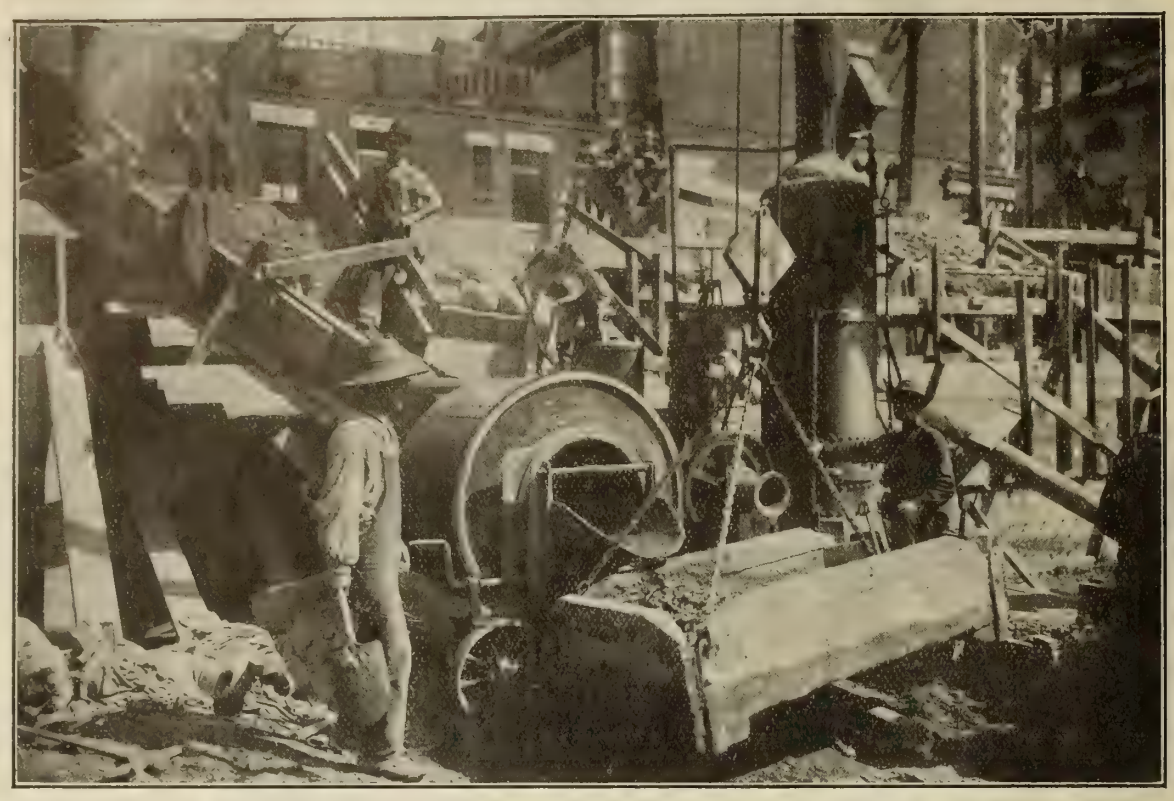

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CANADIAN

CONTRACT RECORD

A Weekly Journal of Engineering, Public Works, Tenders, Advance Information and Municipal Progress

This Paper Reaches Every Week the Town and City Clerks, Town and City Engineers, County Clerks and County Engineers, Leading Civil Engineers and Contractors throughout Canada, and Purchasers of Municipal Debentures.

VOL. 17. TORONTO, MONTREAL — DECEMBER 12, 1906 — WINNIPEG, VANCOUVER No. 41

THE CANADIAN CONTRACT RECORD
PUBLISHED EVERY WEDNESDAY
As an intermediate Edition of the Canadian Architect and Builder.

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TO OUR READERS.

We wish to make the CONTRACT RECORD of the greatest possible value to subscribers, and to that end we ask their co-operation. Each subscriber is requested to consider himself a correspondent of the paper and to send us intelligence regarding proposed works of construction and contracts awarded in his vicinity.

We cannot hope to learn, through our regular channels of information, of all work contemplated throughout this vast Dominion, but by the co-operation of our readers we may more nearly approach the maximum efficiency in the service given.

Correspondence sent to our head office at Toronto or to our branches at Montreal, Winnipeg or Vancouver, will receive due attention and be much appreciated.

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CONTRACTS OPEN.

GALT, ONT.—The Stevens Co. will erect a new moulding shop.

APPIN, ONT.—A bridge will be constructed here to cost $15,000.

LEMBERG, SASK.—J William will erect a residence here next year.

NINGA, MAN.—A new school building is to be erected here, cost $10,000.

PETERBORO, ONT.—W. R. Hetley will erect a brick building next spring.

PARRY SOUND, ONT.—Sewers are to be laid on several streets to cost $5,631.

COBALT, ONT.—A three storey public school is to be erected here cost $8,000.

SARNIA, ONT.—The water mains will be extended to Point Edward, at a cost of $2,500.

MOOSE JAW, SASK.—It is reported that Bullock & Bullock will erect large storage warehouses.

RICHMOND, QUE.—P. O'Connor is having plans prepared for the erection of a large hotel.

LACHINE, QUE.—It is probable that the Grand Trunk Railway will build a new station here.

WINDSOR, ONT.—The Lufkin Rule & Measuring Co., Saginaw, Mich., will erect a factory here.

NEW LISKEARD, ONT.—It is reported that S. Salmon will erect a grist mill to cost $15,000.

NEW WESTMINSTER, B. C.—George McFarlane, Vancouver, will erect a three storey block.

CALGARY, ALTA.—W. M. Alexander will apply to the City Council for a street railway franchise.

TRENTON, ONT. — A reinforced concrete building is to be erected by the Glen Miller Paper Mills.

NAPANEE, ONT.—Debentures will be issued for $7,250 to cover cost of extending sewerage system.

HIGH RIVER, ALTA.—The ratepayers will vote on the question of erecting a town hall at cost of $15,000.

LACOMBE, ALTA.—A.N. Inskip will erect a three storey hotel. The plans have been prepared by J. C. King.

MAPLE CREEK, SASK.—The Town Council have decided to expend $2,000 for extension of waterworks system.

INNISFAIL, ALTA.—The ratepayers have approved of a by-law to raise $23,000 by debentures for the erection of a new school.

CARLYLE, SASK.—Postmaster Riddell has purchased a site on which he will erect a two storey brick veneer building.

WESTMOUNT, QUE.—The ratepayers recently defeated a by-law to make provision for an improved water supply.

SUSSEX, N. B.—The Sussex Institute are considering the erection of brick and stone opera house to cost $12,000.

KEEWATIN, ONT.—A. R. Cardinal and W. Murphy will erect several summer residences in connection with their hotels.

BRACEBRIDGE, ONT.—The ratepayers will be asked to authorize the expenditure of $23,000 for improving the water supply.

CHILLIWACK, B. C.—The ratepayers are considering a drainage scheme, which, if carried out, will cost about $20,000.

ESTEVAN, SASK.—Willis Chipman, C.E., Toronto, has estimated the cost of waterworks and electric lighting system at $67,000.

MILLSIDE, B. C.—The Fraser Saw Mills Company have had plans prepared for a three story hotel which they will erect next year.

PORTAGE LA PRAIRIE, MAN.—The ratepayers will be asked to authorize the issuance of $16,000 debentures for school purposes.

WALNUT, ONT.—W.A. McDonald, Treasurer of the Township of Brooke, is taking tenders for the purchase of $509 5 per cent. drainage debentures.

NIAGARA FALLS, ONT.—G. H. Brooks, Fallsview, Ont., is organizing a company to operate an iron foundry here. The capital of the company will be $100,000.

THOROLD, ONT.—The Provincial Board of Health have considered the plans submitted for the waterworks system, and recommended the installation of a filtration system.

SHAWINIGAN FALLS, QUE.—Plans are being prepared by F. P. Sheldon, Providence, R. I., for a large cotton mill to be erected here for the North American Cotton Co.

BERLIN, ONT.—The ratepayers will vote on the question of issuing $24,612 debentures for the erection of a market building and construction of a trunk sewer in the west ward.

ANACONDA, B.C.—B. A. Isaacs and R. W. Hinton are the promotors of a company who purpose erecting several buildings in connection with the operating of an iron foundry in this town.

GUELPH, ONT.—The City Council have decided to grant a loan to Morlock Bros. The concern will erect buildings at a cost of $18,000.—The Michigan Ammonia Works, Detroit, Mich., will establish a branch here.

ST. JOHN, N. B.—The Grand Falls Power Co., Ltd., who purpose developing power at Grand Falls, are applying to the City Council for a street railway franchise.—The congregation of Germain street Baptist church will erect a new Sunday school.

GODERICH, ONT.—The Rogers Manufacturing Co. have applied to the Town Council for a loan with which to extend their present plant.—The Goderich Carriage Co. are also seeking financial assistance for the purpose of erecting buildings and installing machinery to cost $30,000.

STRATFORD, ONT. — The City Council have authorized the erection of a storage house to cost $3,600.—Plans are being prepared for additions to the Grand Trunk Railway workshops to cost $200,000.—Knox church will erect a Sunday school building at a cost of about $13,000.

QUEBEC, QUE. — The Canadian Pacific Railway have definitely decided to demolish the Chateau Frontenac and erect a more modern structure at a cost of $1,000,000.—The City Engineer is preparing plans and estimates for the paving of several streets and laying of a number of sidewalks.

LONDON, ONT.—At a meeting of the Council of the County of Middlesex the construction of nine bridges was recommended by the County Engineer.—G. T. Hiscox is considering the erection of an arcade.—Additions will be made to Askin street Methodist church to cost $15,000.—The Provincial Long Distance Telephone Company, of Toronto, are applying to the City Council for a franchise.

EDMONTON, ALTA.—The Hamilton Separating Co., Hamilton, Ont., have purchased a site on which to erect a warehouse.—A. W. Cameron will erect a one-storey block, cost $3,000.—The City Council are considering the extension of the waterworks system and electric light plant.—C. H. S. Wade and W. Spurrell are figuring on building a theatre with a seating capacity of 1,200.

HAMILTON, ONT.—The Board of Works have recommended the expenditure of $200,000 for the improvement of roadways.—G. J. White will erect a brick house on Smith avenue to cost $2,100.—F. E. Walker has purchased property, corner King and Catharine streets, on which to erect a two-storey building.—F. B. Wood Co., are about to erect a large addition to their factory.

ST. CATHARINES, ONT. — The City Council have passed a by-law authorizing the construction of several sewers.—A by-law will be submitted to the ratepayers for authority to extend the waterworks system.—Tenders will be received up to December 13 by W. Manson, Secretary Public School Board, for alterations and installation of sanitary appliances in Court street school. Plans with W. G. Watson.—Tenders will be received up to December 31 by the Superintending Engineer of the Welland Canal for the supply of timber, hardware, castings, etc. Specifications at the Engineers' office.

BRANTFORD, ONT. — The ratepayers will be asked to vote on a by-law authorizing the expenditure of $40,000 for the erection of a pumping station.—The Nicholls-Pellatt syndicate, of Toronto, will extend their distributing system to this city, which will be used as a distributing point for the surrounding district.—The American Clay Machinery Co., Willoughby, Ohio, intend establishing a clay and sand brick making plant here.—The Automatic Phone Co., will erect a large building.

VICTORIA, B. C.—Tenders will be received by W. W. Northcott, purchasing agent for the City, up to December 17, for brass goods and pipe fittings.—J. Scott, of Winnipeg, Man., will erect a large residence on Oak Bay Avenue.—An addition will be made to St. Joseph's hospital to cost $75,000.—It is reported that a six storey hotel will be erected on the corner of Elliott and Government streets, on property owned by Mrs. James Anderson.

OTTAWA, ONT.—The date for the reception of tenders for the construction of a wharf at Coleraine, Que., has been extended to December 17.—The building committee of the Separate School Board have decided to install a system of heating and plumbing in St. Matthews and St. Bridgets' schools, also new sanitary arrangements in the former.—The date for the reception of competitive designs for the proposed additions to the Parliament buildings has been extended to the 15th of April, 1907.

VANCOUVER, B.C.—Farrell & Tregent who are erecting an apartment house on Granville street, have decided to make the structure six stories instead of five.—Building permits have been issued as follows: K. O. Hope, residence, corner Comox and Gilford streets, cost $15,000. Parr & Fee, architects; E. Robson, residence on Harro street, cost $8,000; Columbia Building Company, Sixth avenue, three houses; H. Wright, Fourth avenue, $1800; J. Dickie, Sixth avenue, $2500; M. C. McIntyre, West avenue, $3000; L. Wakely, Third avenue, $2300; J. G. and G. H. Lightheart, two dwellings on Pendrill street, cost $7000; T. J. Whitesides, two houses on Fifth avenue, cost $1600.

WINNIPEG, MAN.—H. B. Rugh, architect, will receive tenders up to December 15 for construction of a frame residence.—The Fairchild Co.'s building, tenders for which have just been taken by H. B. Rugh, architect, will be 100 x 132 ft. and consist of six stories and basement. It will be of mill construction, the materials used to be stone and Menominee brick.—An institution known as the Men's Own of the city of Winnipeg will erect a building to cost $35,000.—Tenders will be received by the Chairman of the Committee on Works up to December 18, for the supply of from 2,000,000 to 5,000,000 feet of lumber, also up to December 31, for the supply of water pipe and specials.—A delegation recently waited on the Provincial Government requesting that a railway line be constructed from Somerset, Man., to the International boundary.

MONTREAL, QUE.—Tenders have just been taken by the Pure Ice Co., Ltd., 480 Temple building, for the supply and laying of 540 squares of 100 square feet each of roofing.—Plans have been prepared for extensions to be made to the Montreal Brewing Co.'s premises, to cost $25,000. — Charles Brandeis, C. E., this city, has been appointed consulting engineer to the British North American Lumber Co., who purpose installing an electric light plant.— The Westmount Protestant School Commissioners have purchased property for a school site.—The following building permits have been issued: Israel Coutre, 3 dwellings, Aylwin, cost $2,000; Chas. Sarrazin, 2 dwellings, Dufferin, cost $1,800; P.L.W. Dupre, 2 dwellings, Delorimier avenue, cost $2,000; R. Legare, 6 dwellings, Ontario, cost $8,000; F. Cote, 2 dwellings, cost $2,000; A. Pion, 4 dwellings, Marquette, cost $4,000; store, house and 2 dwellings, corner Gilford and Marquette, cost $4,000; Neveu Zotique, 2 dwellings, Gauthier and Dumont, cost $2,000; Hon. V. Perodeau, addition to store, St. Catharine west, cost $2,500.—Special meetings of the congregation of Knox church and members of Y.M.C.A. have been called at which to discuss the offers made by local capitalists for for their properties.—It is reported that $150,000 has been offered for the former and $350,000 for the latter.

TORONTO, ONT.—Darling & Pearson have been appointed architects for the new General Hospital.—Tenders will be received up to December 19 by the Board of Control for electric wiring and tiling for the new Central firehall, on Adelaide street.—The Ontario Government have decided to proceed with the extension of the Temiskaming & Northern Ontario Railway.—A building will be erected by McMaster University to provide lecture room, gymnasium and dormitories.—The parish of Our Lady of Lourdes are considering the erection of a new church.—The congregation of St. John's Presbyterian church have decided to erect a church and sunday school to cost $50,000.—Tenders will be received by the Board of Control up to December 18 for construction of piling around city yard at Princess and Esplanade streets.—The following building permits have been issued: Edmonson, Bates & Co., 5 storey brick warehouse, corner Duncan & Adelaide streets, cost, $25,000; Otto Higel Company, 2 story and attic brick and stone dwelling, 146 Dowling avenue, cost, $8,500; H. Larkin, 3 attached 2 storey and attic roughcast dwellings, brick fronts, Hallam street, cost $6,000; MacDonald Mfg. Co., 4 story brick addition to factory, Catharine street, cost $18,000; W.O. McTaggart, 4 tow storey and mansard brick stores and dwellings, 1005 Bloor street west, cost $12,000; Dr. T. D. Archibald, 2-storey and attic brick dwelling, corner College street and Palmerston avenue, cost, $7,000; G. Claxton, pair 2 story roughcast dwellings, brick fronts, Winnifred avenue, cost, $2,000; Gerrard street Methodist church, alterations to church and sunday-school, corner River and Gerrard streets, cost, $10,000.

CONTRACTS AWARDED.

OSHAWA, Ont.—$7,000 4½ per cent. debentures awarded to Wood, Gundy & Co., Toronto.

QUEBEC, QUE.—Erection building for the Quebec Railway Light & Power Co.: W. Sharpe, contracter.

REGINA, SASK.—$180,000 4½ per cent. local improvement debentures awarded to Nay, Anderson & Co., Regina.

OTTAWA, ONT.—Additions to Parliament buildings: McGillivray & Blake, Ottawa., successful tenderers, at $235,000.

WATERLOO, ONT.—$18,000 4½ per cent. town debentures awarded to Dominion Securities Corporation, Toronto, Ont., at $17,727.

GODERICH, ONT.—Installing Kelsey system of warming and ventilating in Baptist church: James Smart Mfg. Co., Brockville.

FLESHERTON, ONT.—Heating and ventilating the Temperance Hotel: James Smart Mfg. Co., Brockville, successful tenderers.

MILTON, ONT.—$4,000 County of Halton debentures awarded to F. H. Deacon & Co., Toronto, highest tenderers.

WINNIPEG, MAN.—The Canadian Northern Railway Co. have let contracts for equipment to cost $4,825,000. The cars will be supplied by Rhodes, Currry Co., Amherst, N. S., Crossen Car Co., Cobourg, Ont., and Canada Car Co., Montreal, Que.; Locomotives by, Can-

Continued on Page 5.)

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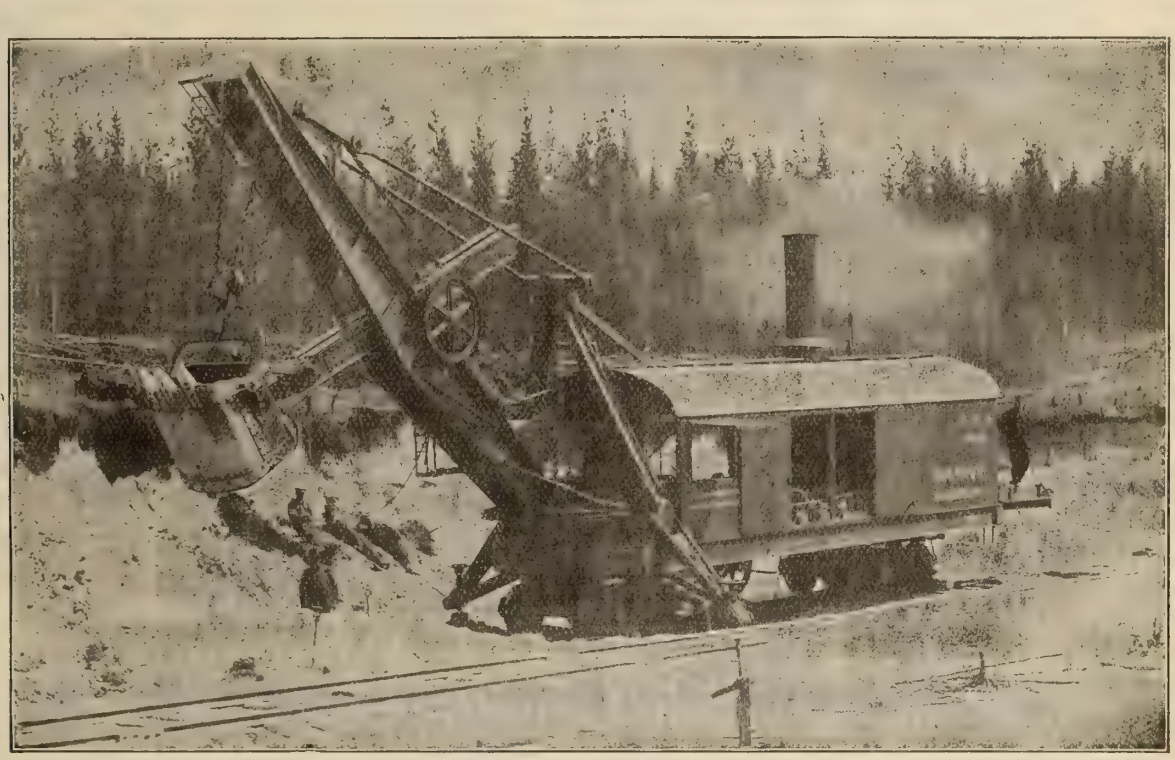
Find Heavy Work Light

Known for Steady Continuous Running under good or bad conditions



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Dump Wagons

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MONTREAL

RURAL TRANSPORTATION.

The difficulties encountered in obtaining a cheap but efficient system of freight and postal delivery in rural sections has so far prevented any material success in this particular field. The interurban railway has played an important part in such matters, and is, of course, highly successful, though to justify the expenditure required for the construction of such an undertaking, the communities which it serves must be fairly well built up. Automatic devices of various kinds have been tried with limited success, for it appears to be essential to put the cars under the direct control of an operator who must necessarily travel with the car. When one considers the success which has been obtained in the manufacture of various articles by machines which are automatic in every sense of the word, it does not seem improbable that some day similar ideas may be incorporated into a system for rural freight delivery. A company is now being floated in Canada and the United States which has for its purpose the establishment of an automatic transportation system, the idea being to handle incoming and outgoing mail and freight of every description. A model of this system is now being exhibited in the city of Toronto, and the idea as presented seems to be quite feastible when carried out on a small scale. Success, of course, has been obtained in collecting mail bags by a fast moving train, and the system just mentioned is being worked out along somewhat similar lines. So far as the postal end of the scheme is concerned, the feasibility of the idea is apparent, because for this work the weights to be handled will always be small, and letter boxes can be picked up and dropped without material jar to the car itself or to its supporting structure. Any entirely automatic system must necessarily include tracks which are elevated a considerable distance above the ground, and while the cost of such structure is quite low where small weights are to be handled, still the expense will, we think, be a very serious item where heavy weights are concerned, and the possibility of picking up and dropping such weights from a moving car will bring forward many arguments against the system. The transportation scheme just mentioned includes a system of control whereby all cars are manipulated by an operator at the central point, and a modification of the block signal has been adopted so that the operator will know at any instant the exact position of all cars. Difficulty will be experienced, however, in keeping such cars properly spaced, as the speed of one, heavily loaded, will be considerably less than that of one running light. Slowing down and stopping at certain predetermined stations will also be another difficulty, for the cutting off of the current and the braking action must take place at some set point, and allowance cannot be made for the condition of the rails. In other words, assuming for the sake of argument that the car is carrying a fixed load, if it be desired to stop or run slowly past a certain station, the brakes will be applied and the current cut off at a fixed number of yards before that station is reached. If the rails at this point are covered with ice, we cannot see what there is to prevent the car running past the station, and as there are no reversing appliances the car would undoubtedly pass on to the next station without delivering its freight. However, we must commend the spirit which has led the inventors to make a practical demonstration of the scheme, and we sincerely hope that the matter will prove satisfactory under actual working conditions.

SCHOOL OF SCIENCE DINNER.

The eighteenth annual dinner of the Engineering Society of the School of Practical Science, Toronto, was held at the Rossin House Friday evening, December 7th. About 400 persons were present. The tables were beautifully decorated and the banneret menu was a clever invention. The presiding officer was Mr. K. A. MacKenzie, President of the Engineering Society, while at the guest table sat President Hutton, of the University; Hon. W. J. Hanna, provincial secretary; H. Cockshutt, president Canadian Manufacturers' Association; J. W. Flavelle; Principal Galbraith; Dr. Ellis; Rev. Bruce MacDonald; Edmund Burke, president Ontario Association of Architects; C. H. Rust, city engineer; Prof. Steward; Prof. C. H. C. Wright; Prof. Mickle and Prof. T. R. Rosebrugh.

The toast list and respondents were as follows: "The King" by singing the National Anthem;" "Canada and the Empire," by Mr. Cockshutt; "The Legislature," by Hon. Mr. Hanna; "The University," by President Hutton and Rev. Bruce MacDonald; "The Faculty of Applied Science," by Professor Galbraith; "Canadian Industries," by Mr. J. W. Flavelle, and "The Profession," by Messrs. C. H. Rust, M. Haney and E. Burke.

RULES FOR TELEPHONING.

In rules regarding the use of the telephone enforced by Marshall Field & Company, the following notice is conspicuously displayed in every department of their big Chicago store: "The manner in which a person uses a telephone indicates his character to a great extent and makes either a good or bad impression, and this impression is reflected directly upon the establishment from which such a message comes. It is a pleasure to do business with a house which performs every detail in a clean-cut, satisfactory manner; but it leaves a sting to be answered abruptly or discourteously over the telephone. It is folly to lose one's temper because one does not get immediate connection. This is rarely if ever the fault of the telephone operators, who are nearly always courteous and prompt. When one is called to the telephone he should respond quickly, and the person calling should not be left to hold the wire too long—something decidedly irritating and often unnecessary. Let us throughout the whole house strive to excel in satisfactory telephoning. Important Note—You will be heard distinctly if you place your lips within an inch of the mouthpiece and talk naturally as, if the person were standing beside you."

The Northern Electric and Manufacturing Co., Limited
MONTREAL AND WINNIPEG
TELEPHONES, SWITCHBOARDS, FIRE ALARMS, LINE MATERIAL AND SUPPLIES . . . . .
GENERAL OFFICE AND FACTORY - - Corner Notre Dame and Guy Street, MONTREAL

adian Locomotive Works, Kingston, Ont., Canada Foundry Co., Limited, Toronto, Ont., and Locomotive & Machine Company, Montreal, Que.

TORONTO, ONT.—Erection of a central fire station, corner Adelaide and Simcoe streets: Masonry, F. Holmes, $32,964; carpenter work, P. Arnot, $13,432; plumbing, J. E. Gray, $2,036; heating, Toronto Furnace & Crematory Company, $2,875; iron work, Dominion Bridge Co., $4,200; lathing and plastering, Beaver & Company, $1,995; painting and glazing, Taylor & Company, $815; slating, galvanized iron and felt and gravel, roofing, Forbes & Co., $1,173.

FIRES.

Repair shops of Canadian Northern Railway, Winnipeg, Man., loss $7,000.—Matthews, Towers & Co., Yorkshire Importing Co., Canadian Underwear Co., and others, Montreal, Que., estimated loss $40,0000.—Grant Bros. drug store, F. A. McCulloch & Co., dry goods store and adjoining buildings, New Glasgow, N. S., loss $100,000.—J. B. Myers' hardware store, Stratford, Ont., loss $2,000.—Canadian Folding Paper Box Co's building, Brantford, Ont., loss $2,000.—Brick block owned by Kennedy Estate, Campbellford, Ont., loss $2,000.—Shops of Marine Iron Works, Victoria, B. C., damaged to the extent of $5,000.—Building of the Owen Sound Advertiser, loss $1,000.—General store of J. R. Grant, Listowel, Ont., loss $15,000.—Boiler shops of the Canadian Northern Railway, Winnipeg, Man., loss $60,000.—Working house of the Canadian Pacific Railway, Fort William, Ont., loss $60,000.—St. Patrick's Home, Halifax, N. S., damaged to extent of $2,000.—Strathcona Hotel, Neidig block and other buildings at Fort Steele, B. C., loss $30,000.—Offices, draughting room aud portion of machine shop of

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METALLIC ROOFING Co
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TORONTO, CANADA.
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"BULL DOG" SHOVELS

forged from one piece of High Carbon Bar Steel without weld or rivet, solid neck and blade, tempered in oil, straight chucked handle can be replaced when broken.

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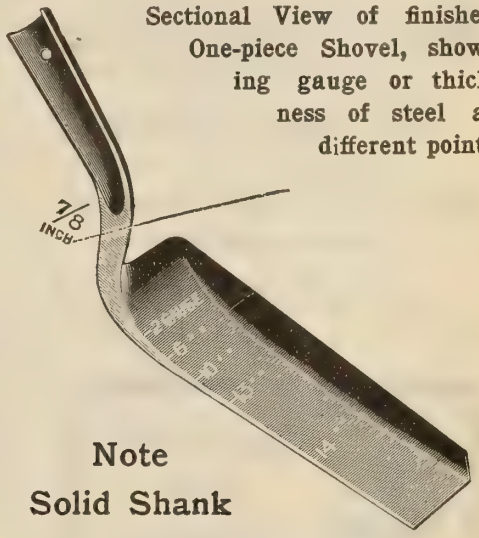
WRITE FOR CATALOGUE LIMITED HAMILTON, CANADA



Sectional View of finished One-piece Shovel, showing gauge or thickness of steel at different points

Note Solid Shank

. . . Speaks For Itself . . .

THE MILES CONCRETE BUILDING BLOCK MACHINE

Makes 49 Different Sizes of Stone in Any Design, as well as the Specials, viz.:
Water Table, Gable, Circle, Angle, Chimney, Cornice, Pier Blocks, etc.

Catalogues and Information Cheerfully Furnished.

This Machine makes all blocks face down—"the only practical way"—allowing of a richer and finer facing, producing blocks that are perfect in appearance and impervious to moisture.

Let us tell you how the "Miles" will pay for itself over any other machine in three months' operation.

Manufactured and Sold by

VINING BROS. M'f'g. Co.

Niagara Falls, - Can.

Robb Engineering Co., Amherst, N. S., loss $25,000.—Car barns of the Galt, Preston & Hespeler Electric Railway Co., and the Preston & Berlin Electric Railway Co., Preston, Ont., loss $80,000. — Kilborn & Davisons' cheese factory, Delta, Ont., loss $2,000.—Store of Richard Hall & Sons, Peterboro, Ont., $3,000. — McGarvey building, C. A. Workman's building and adjoining structures, Montreal, Que., loss $200,000.

During the month of November 108 building permits, valued at $431,650, were issued in Montreal, Que. This shows an increase of $118,000 over the same month last year.

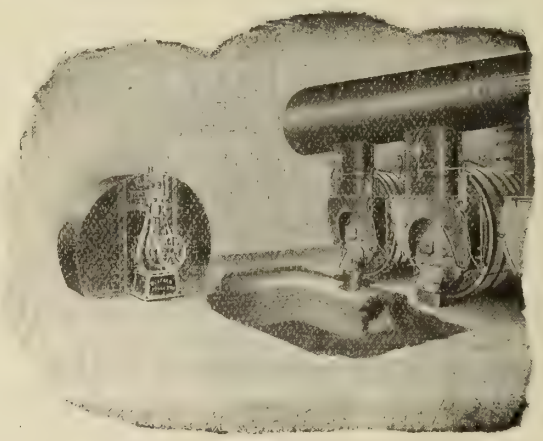
In the basement of the City Hall at Medicine Hat and under the supervision of the City Engineer, several men are employed in the manufacture of cement pipe for the city. The capacity of the plant is about 500 feet per day and the engineer estimates a saving of 5 cents per feet as well as freight charges, on the price that would have to be paid were the pipes bought in the east.

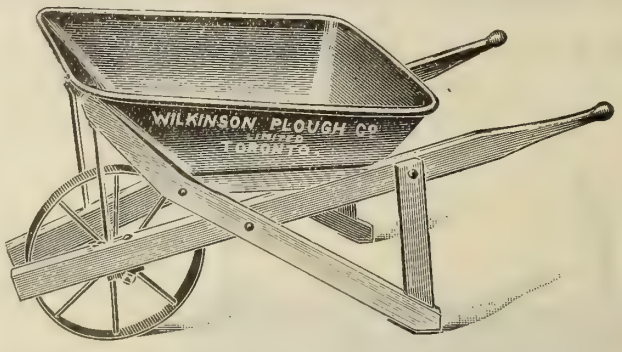
A. LEOFRED
(Graduate of McGill).
Consulting Engineer
WATERWORKS A SPECIALTY.
39 St. John Street Metropolitan Ins. Bldg. QUEBEC
Phone 545.

JNO. S. FIELDING
C. E.
CONSULTING ENGINEER
Concrete Dams
Power BRIDGES
MACHINERY Plants
Hydraulics
25 Years' Experience
15 TORONTO STREET - - TORONTO

Matthews Fire Hydrant
Is the recognized Standard Hydrant, and is the easiest Hydrant to keep in order.
Our Hydrants are thoroughly tested before shipment, and are of substantial proportions and weight.
Have your Engineer specify "The Matthew's" and get our tender.
THE KERR ENGINE CO., LIMITED
Walkerville - Ont.

McGREGOR & McINTYRE, LIMITED
67 to 91 Pearl Street, Toronto, Ont.
STRUCTURAL IRON WORKS
Beams, Channels, Tees, Angles, Chequered Plates, etc., in stock.
Fire Escapes. Sidewalk Doors, Iron Stairs, etc., etc.
Sole Agents for Duplex Hangers and Goetz Post Caps, Wall Boxes, etc.
PHONES: 7248 7249 ESTIMATES FURNISHED


MECHANICAL DRAFT
Short Stacks
Positive Draft
Saves Fuel
Burns Cheap Coal
Constant Steam Pressure
Independent of Weather
Catalogue ?
CANADIAN BUFFALO FORGE COMPANY, LTD.
MONTREAL, QUE.

THE WILKINSON PLOUGH COMPANY, LIMITED
TORONTO, CANADA


SOLID STEEL TRAY
TRAY: Solid Pressed Steel, Edges Turned Over.
WHEEL: Heavy Wrought Iron, running in Cast Bearings.
FRAME: Selected Hardwood, Handles Capped and Projecting over Wheel.
OF PARTICULAR INTEREST TO MUNICIPALITIES

Canadian White Company, Limited
SOVEREIGN BANK BUILDING, MONTREAL, CANADA
WINNIPEG OFFICE: BANK OF BRITISH NORTH AMERICA BUILDING
ENGINEERS AND CONTRACTORS
FOR
Steam and Electric Railroads: Electric Light and Power Plants: Building Construction: Water and Gas Works: Docks, Harbor Works, etc., etc.
CORRESPONDENTS
J. G. WHITE & COMPANY, INC., New York City
J. G. WHITE & COMPANY, LIMITED, London, England
WARING-WHITE BUILDING CO. London, England

Peter Craib, a well-known builder of Woodstock, Ont., recently died at his home. Deceased was born in Mortlach, Scotland, in 1822. Coming to Canada in 1853, he settled in Hamilton, Ont., the following year he removed to Woodstock and became associated with D. R. Stewart in the building and contracting business. He was for several years a member of the Town Council and was also Reeve of the County.

JOHN GALT
C. E. and M. E.
CONSULTING ENGINEER and EXPERT

SPECIALTIES:
WATERWORKS, SEWERAGE AND ELECTRIC LIGHT

Chief Assistant Engineers:
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The Electric Blue Print Co.
40 Hospital Street, MONTREAL
BLUE PRINTS
POSITIVE BLUE PRINTS
BLACK PRINTS
MULTI-COLOR PRINTS
Best Finished Work on the Market at the Lowest Prices.

WHY PURCHASE STRUCTURAL STEEL
We offer 300 tons second hand TEE AND GIRDER RAILS, for bridges, &c., cut in lengths to suit purchasers.
SESSENWEIN BROS., MONTREAL

Men for Contractors
EMPLOYMENT OFFICE
Phone 4855 WINNIPEG, MAN. 868 Main St.
Men of all descriptions furnished on short notice for railroad and building contracts.
Special Attention Given to Furnishing Gangs
E. E. BRYANS & CO.

THE BITULITHIC PAVEMENT
The Most Progressive Cities are Paved with Bitulithic
Some Recent Contracts:—
Toronto 31,441 sq. yds. Chatham 15,633 sq. yds.
Halifax 30,000 sq. yds. Amherst 8,000 sq. yds.
Regina 21,215 sq. yds. St. Catharines 4,600 sq. yds.
St. Boniface 18,272 sq. yds. Total . . . . 129,161 sq. yds.
— A Well Paved City Bears the Stamp of Progress —
WARREN BITUMINOUS PAVING COMPANY, LIMITED
Head Office: 164 Bay Street, TORONTO
Branches: Chatham, St. Catharines, Ottawa, Regina, Halifax, Amherst.

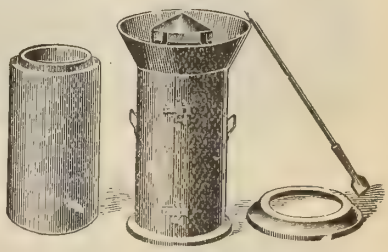
Portland Cement...
HIGH GRADE GERMAN BRANDS FOR GRANOLITHIC AND ARTIFICIAL STONE SIDEWALKS.
Sewer Pipes, Culvert Pipes, &c.
Best English Cements. Best Belgian Cements
W. McNALLY & CO., Montreal

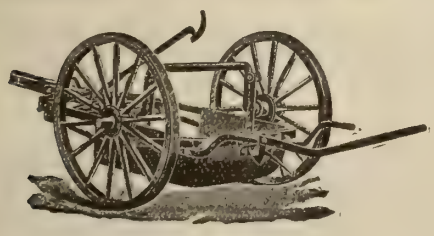
JOSSON CEMENT
Is the Highest Grade Artificial Portland Cement and the Best for High Class Work. Has been used largely for Government and Municipal Works.
TO BE HAD FROM ALL CANADIAN DEALERS OR FROM
C. I. DE SOLA, 180 St. James Street, MONTREAL

AMBURSEN DAMS
OF REINFORCED CONCRETE
Write us at once for information.
Ambursen Hydraulic Construction Co., of Canada, Limited
Coristine Building, MONTREAL

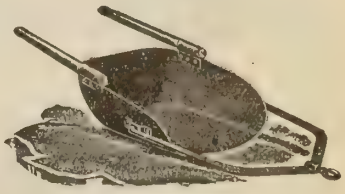
A. & E. LOIGNON, C. E.
17 Place D'Armes Hill, MONTREAL
REINFORCED CONCRETE CONSTRUCTIONS
FOR
Fireproof Buildings, Hydraulic and Public Works
Steel Structures for Bridges and Buildings
Warehouses, Factories, Water Power Development

ROBINSON'S PATENT MOULD
for Cement Culvert Pipe
With or without Cone Top Filler. These Moulds are standard both in sizes and thickness of wall. Furnished with plain or telescopic joints. Write for Catalogue.
CLIMAX ROAD MACHINE CO.
HAMILTON, ONT.





The Toronto Pressed Steel Co., Limited
Toronto and Winnipeg
. . Manufacturers . . .
Drag Scrapers (Solid pressed bowl)
Wheel Scrapers (pressed or square bowls)
Dump Cars, from 1 to 3 yards
Wheelbarrows, Wood or Steel Trays
Waggons, Carts, Cement Mixers, Etc.
Prompt delivery from stock at Toronto and Winnipeg.
Send for complete catalogue. Write nearest office.

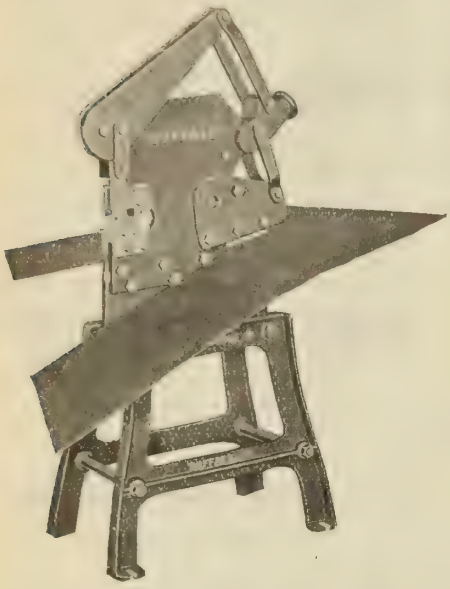


Spigot and Faucet Pipe
MADE IN 12' 0" LENGTHS
3 TO 48 INCHES DIAM.

Flanged Pipe
Turned and Bored Pipe
MADE IN SEVERAL WEIGHTS
PROVED FROM 100 TO 700 LBS.
AND SPECIAL CASTINGS
"THE WORLD'S STANDARD FOR ACCURACY, QUALITY AND FINISH."
WE ARE PREPARED TO QUOTE DELIVERED PRICES, AND MAKE PROMPT DELIVERIES IN ANY PART OF CANADA
L. H. GAUDRY & CO., Canadian Agents for Robt. Maclaren & Co., Glasgow. QUEBEC AND MONTREAL

A NEW BUFFALO CONTINUOUS SHEAR, PUNCH AND BAR CUTTER.

During the past three years quite an extensive line of armour plate punches, shears, and bar cutters, comprising in all some 32 machines,



has been brought out by the Canadian Buffalo Forge Company, Montreal. The machine illustrated in the act of shearing a plate is a new addition to this line which has just passed through several months of practical use to test the various points of merit claimed for it. One special feature is the provision for shearing any length without binding or crimping by placing an ingenious device between the top and bottom plate to prevent any tendency in this direction.

The machine is built in three sizes, known as Nos. 2½, 3½ and 4½, weighing respectively 150, 320 and 460 pounds. The smallest will punch ¼ inch holes in ¼ inch plates, split plates of No. 12 gauge, cut round iron up to ½ inch in diameter and ¼ x 1 inch flat stock. The intermediate size punches ⅜ x ⅜ inch, splits No. 10 gauge and cuts ⅝ inch round and 5/16 x 2 inch flat bars, and the largest punches ½ x ⅜ inch, splits No. 8 gauge and cuts ¾ inch round and ⅜ x 2½ inch flat bars.

The frames are made of armour plate and the other parts consist of drop forgings and crucible steel, with the exception of the stand, which is of cast iron. The bearing surfaces are machined and carefully fitted to eliminate lost motion. The jaws of the shears are of tempered crucible steel, and it is claimed will not give at the ends or spring and will not break under continual use at the rated capacities.

The use of much sheet metal in the company's works led to the development of these tools, where lightness, strength and indestructibility were important qualifications. Originally they were offered to the blacksmith trade only, but they have proved to be very convenient for workers in structural iron, and are now presented to the metal working trades in general.

The complete line includes machines for almost every use that may arise in these trades.

It is reported that Lee & Cunnlife, contractors, Hamilton, Ont., have assigned to W. G. E. Boyd.

The McKinley Darragh Savage Mines have purchased from Allis-Chalmers-Bullock, Limited, of Montreal, a large amount of mining machinery, including a powerful cross-compound air and compound steam Ingersoll air compressor, Ingersoll rock drills, two 80 h. p. boilers, a feed water heater condenser, air pump, Lidgerwood standard mining hoisting engine air receiver, etc.

At the annual meeting of the Ontario Portland Cement Company, Limited, which was held at the company's office, Brantford, Ont., on December 1st, the directors report and the auditor's statement were received and found to be entirely satisfactory. The following officers were elected: E. L. Goold, president; W. S. Wisner, vice-president; W. G. Elliott, managing director, and S. H. J. Reid, secretary.

GERMAN ALSEN, at higher prices than competitors has again this year been awarded the most important contracts of the World because practical tests by leading Engineers proved its merit and relative economy. Note the following:

		1905—1906		1905—1906
MEXICO CITY		120,000 bbls.	U.S. PHILIPPINE GOVMT. ORDER	40,000 bbls.
NECAXA DAM	(shipping instructions so far 60,000 bbls) approximate amount	175,000 bbls.	GOVMT. ORDER SOUTH AMERICA	150,000 bbls.
XOCHIMILCO WATER WKS., MEX.	approximate	200,000 bbls.	RIO DE JANEIRO, SANTOS, ETC.	40,000 bbls.

- Also enormous quantities for the PACIFIC COAST, AUSTRALIA, ENGLAND, SOUTH AFRICA, &c. -

There is always a certain trade who will pay for the best. We also make American Alsen, the highest grade of domestic Portland cement.

CEMENT 45 BROADWAY, NEW YORK CITY **CEMENT**

We protect our customers!

FIRE ESCAPES

Wire Screens for Road Making

Wrought Iron and Wire Guards and Enclosures for Jails, Asylums, Etc.

The Geo. B. Meadows, Toronto Wire, Iron & Brass Works Company Limited

67 Wellington Place, TORONTO

GALVANIZED WIRE WOUND WOODEN PIPE

No frost breaks, no corrosion. No electrolysis. It is easily and cheaply laid.
Its carrying capacity is never decreased by rust.

JAMES THOMSON, President. J. G. ALLAN, Vice-President. JAMES. A. THOMSON, Secretary. ALEX. L. GARTSHORE, Treasurer.

THE GARTSHORE-THOMSON PIPE & FOUNDRY CO.

LIMITED.

Manufacturers of

Flexible and Flange Pipe, Special Castings and all kinds of Waterworks Supplies.

3 inches to 60 inches diameter.

for Water, Gas, Culvert and Sewer

HAMILTON, ONT.

CANADIAN IRON AND FOUNDRY CO.

LIMITED

Special Castings
Flange Pipe
Branches
Hydrants
Valves

Valve Boxes and General Water Works Supplies

SMALL DIAMETER WHEELS AND AXLES FOR CONTRACTORS.
CAR WHEELS. CASTINGS OF ALL KINDS.

Works at: HAMILTON, ONT. ST. THOMAS, ONT. FORT WILLIAM, ONT. MONTREAL, P. Q. THREE RIVERS, P. Q. LONDONDERRY, N. S.

HEAD OFFICE: - CANADA LIFE BUILDING, MONTREAL

Dominion Government Estimates for Year Ending March 31, 1908

The Dominion Government estimates for the year ending March 31, 1908, were recently submitted to Parliament. They provide for an expenditure of $105,689,519.03 and include the following appropriations for railways, canals, public buildings, etc.:

RAILWAYS AND CANALS—CHARGEABLE TO CAPITAL.

Intercolonial Railway.—Improvements at Mulgrave, $61,000; to increase accommodation at Pictou, $34,000; extension to Sidney Mines, $51,200; Glengarry water tank and reservoir, $8,500; to increase accommodation at Sydney, $5,500; improvements at North Sydney Junction, $4,500; to increase accommodation at Stellarton, $9,000; improvements at Sackville, $30,000; improvements at Amherst, $34,000; improvements at Newcastle, $32,000; increased accommodation at Antigonish, $10,250; Pirate Harbour water service, $10,000; to dredge and blast rock at Deep Water Terminus, Halifax, $5,000; to increase accommodation at Truro, $110,000; to increase accommodation at Halifax, $300,000; locomotive and car shops, and land purchase at Moncton, $520,000; air brakes to freight cars, $21,000; to exchange drawbars of freight cars, $37,500; air compressors and reservoirs, $5,400; air-brake equipment, $19,500; new machinery for locomotive and car shops, $100,000; to increase water service, $32,000; increased accommodation and facilities along the line, $62,000; new turntables, $24,000; improvements at Ste. Rosalie, $13,000; additional sidings along the line, $19,200; Ballast plough and unloader, $6,500; to improve telegraph line, $24,500; improvements at Drummondville, $25,000; to increase accommodation at Ste. Flavie, $21,500; engine house, &c., Chaudiere Junction, $66,800; engine house, machine shop, &c., at Riviere du Loup, $65,000; towards double tracking parts of line, $200,000; improvements at Campbellton, $15,700; increased accommodation at St. John, $14,000; to strengthen bridges, $309,000.

Prince Edward Island Railway.—Increased accommodation at Charlottetown, $318,000; rolling stock, $20,000; extension of wharf at Souris, $55,000; shelter and platform at Albion, $600; shelter and platform at Uigg, $500; improvements at Summerside, $250; improvements at Toronto road, $500; Murray Harbor Branch Land purchase, $6,560.

Lachine Canal.—Rebuilding slope wall, $90,350. Soulanges Canal.—Manny's gate bars, $8,250; bridge at Clement's Gully, $12,000; improvements, $16,080. Chambly Canal.—Improvements at St. Johns Harbor, $25,000. Quebec Canals.—To purchase cement, $55,000. Cornwall and other St. Lawrence Canals.—Englargement, $7,000; to build oil and lumber storehouse, $3,000. River St. Lawrence.—Removal of shoals in River, upper entrance Galops Canal, $28,000. Trent Canal.—Construction, $280,000; surveys, $4,000. Welland Canal.—Electric lighting and power plant, $50,000; to remove centre piers and rebuild bridges at Queenston street and Homer road crossings, $70,000; to make survey of canal, $10,000; to build turning basin, culvert and dock at Welland, $60,000; to widen canal near Welland, $75,000; improvements at Port Colborne entrance, $200,000; elevator at Port Colborne, $637,000. Sault Ste. Marie Canal.—Construction, $150,000. Lachine Canal.—Wall at Warehousing Company's basin, No. 2, $27,150. Soulanges Canal.—General repairs, $5,200; lock gates lifter, $12,000. St. Ours Lock.—New boom piers and booms, $4,100; Manny's gate bars, $1,500. Carillon and Grenville Canals.—To macadamize road, Carillon Canal, $10,230; General repairs, $1,600. St. Anne's Lock.—Manny's gate bar, $1,500; General repairs, $1,200. Quebec Canals. — Dump scows, $4,500; re-marking boundaries, surveys, etc., $2,500; to purchase cement, $16,000. Chambly Canal.—To macadamize towpath, $14,000; to strengthen banks at Ste. Therese, $9,500; general repairs, $5,900. Cornwall Canal. — A gate lifter, $10,000; to make land plan and mark boundaries, $5,000; to rebuild river wharf at foot of canal, $2,500; to complete north bank above lock 21, $10,000; to provide storage room for spare gates, $2,000. Galops Canal.—To build retaining walls, $15,000. Murray Canal.—To rebuild piers of concrete, $55,000. Welland Canal.—To build retaining wall in the rock cut $70,000; to renew entrance piers at Port Maitland, $15,000; dredging in Port Dalhousie entrance, $5,000. Trent Canal.—Improvements, $33,500; dam at Buckhorn, $35,000; new boat for towing and inspection, $15,000; dam at Lovesick, $10,000.

PUBLIC WORKS—CHARGEABLE TO CAPITAL.

PUBLIC BUILDINGS. — Fittings, furniture, transit house etc., Ottawa Astronomical Observatory, $8,000; Ottawa Royal Mint, $55,000; additions and alterations, parliament buildings, Ottawa, $175,000; improvements, Rideau Hall, Ottawa, $100,000; Victoria Memorial Museum, Ottawa, $200,000; Addition to eastern departmental block, Ottawa, $75,000; new departmental buildings, including site, Ottawa, $400,000; addition to library, Supreme Court, Ottawa, $24,000.

HARBORS AND RIVERS.—Improvements Quebec harbor, $280,000; harbor and river improvements, Port Arthur and Fort William, $500,000; improvements at St. Andrews Rapids, Red River, $200,000.

PUBLIC WORKS—CHARGEABLE TO INCOME.

PUBLIC BUILDINGS.

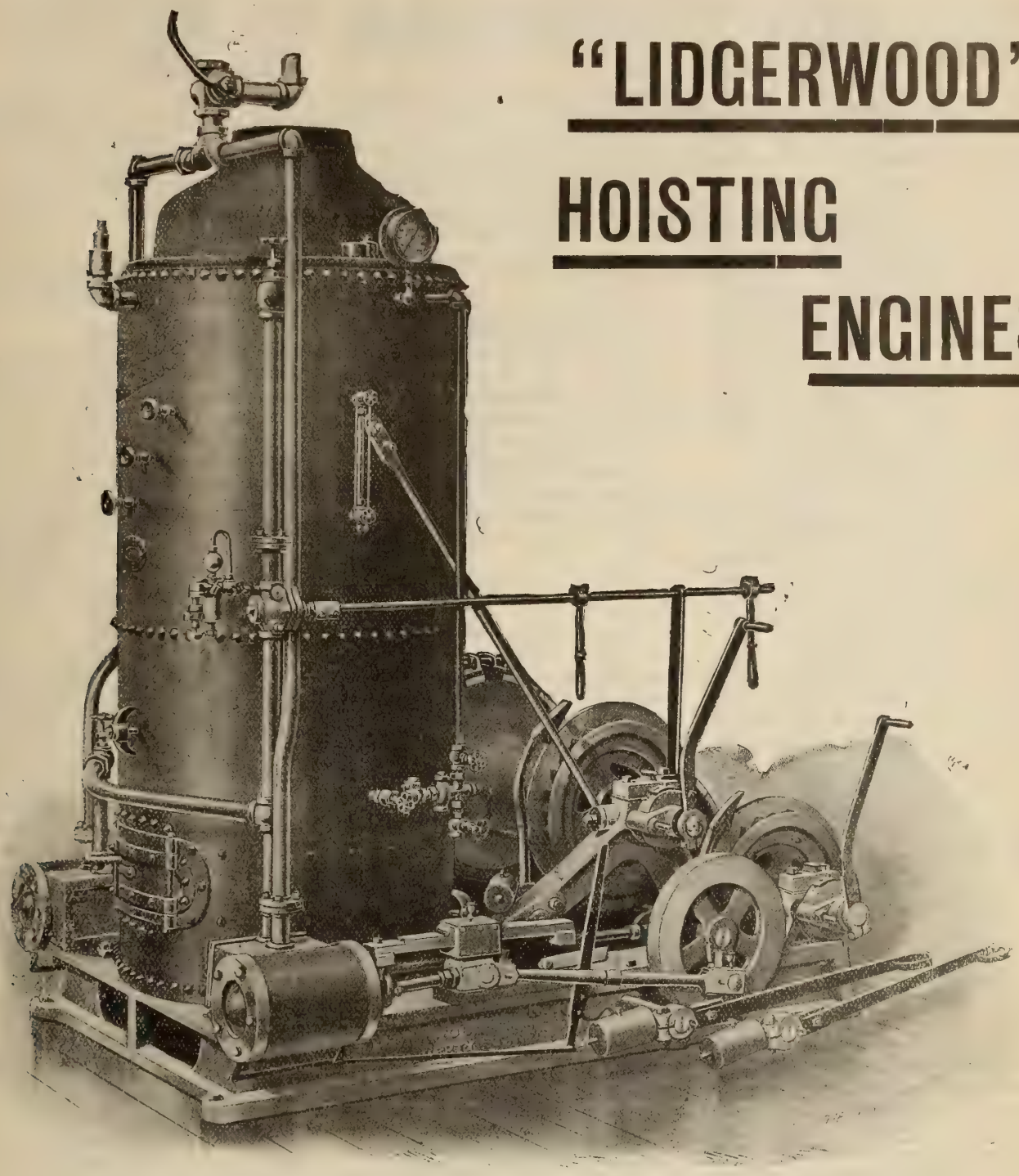
Nova Scotia—Antigonish public building, $5,000; Bridgewater public building, $7,000; Canso public building, $5,000; Glace Bay public building, $20,000; improvements, repairs, etc., Halifax Dominion building, $20,000; Halifax immigrant building, $1,000; Halifax immigrant detention building, $11,000; Halifax new public building (Custom House, etc.) $22,000; winter hospital, electric plant, repairs, etc., Halifax quarantine station on Lawlor's Island, $10,000; Inverness public building, $18,000; Shelburne public building, $10,000; Westville public building, $10,000; improvements, Yarmouth public building, $2,000.

Prince Edward Island.—Souris public building, $3,000; assistance to municipal authorities towards opening Summer st. to Walter st. Summerside public building, $1,500.

New Brunswick. — Improvements, repairs, &c., St. John Dominion buildings, $2,000; addition to stores building and wagon and gun shed, St. John military buildings, $13,000; laundry and sanitary works, Tracadie Lazaretto, $5,000.

Quebec.—Chicoutimi post office, $12,000; renewals, improvements, repairs, etc., Dominion public buildings, P. Q., $16,000; improvements and repairs to buildings, Grosse Isle quarantine station, $12,000; disinfecting apparatus, including building, Grosse Isle quarantine station, $7,500; Iberville public building, $10,000; Immigrant buildings generally, P. Q., $5,000; Lachute public buildings, $10,000; Levis public building, $8,000; Magog public building, $10,000; Montmagny public building, $10,000; Montreal barracks for permanent corps, $20,000; new stores building, Montreal militay buildings, $10,000; building for, and installation of pneumatic tube system for post office purposes, Montreal post office, $50,000; site and building for Montreal new postal station B, $30,000; improvements, alterations, repairs, etc., Montreal public buildings,

"LIDGERWOOD" HOISTING ENGINES



This Double Drum, Double Cylinder Hoisting Engine, a favorite for general contracting work, is one of the different styles we build on "Lidgerwood" designs.

CONTRACTORS' PLANT

"Ingersoll" Air Compressors and Rock Drills; "Lidgerwood" Hoisting Engines and Ballast Unloaders; "Gates" Rock Breakers; Allis-Chalmers Steam Shovels; "Bullock" Electric Motors and Generators.

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LIMITED

Head Office and Works: MONTREAL

District Offices:
MONTREAL: Sovereign Bank Bldg.
NEW GLASGOW: N.S. Telephone Bldg.
WINNIPEG: 251 Notre Dame Ave.
TORONTO: Traders Bank Bldg.
NELSON: Josephine St.
VANCOUVER: 416 Seymour St.

$8,000; Nicolet public building, $17,000; drill shed for school of gunnery, Quebec citadel, $10,000; repairs, furniture, etc., Governor General's quarters, Quebec citadel, $2,000; additions, renewals, repairs, etc., Quebec immigrant buildings, $7,500; reconstruction of building destroyed by fire, Quebec immigrant hospital for treatment of immigrants suffering from trachoma and kindred diseases, in Savard park, $40,000; main store building at Dominion arsenal, Quebec military buildings, $6,500; public building, Queen east, $30,000; Sherbrooke drill hall, $20,000; St. Hyacinthe drill hall, $10,000; stables for cavalry, St. Johns military buildings, $7,000; St. Johns public building, $25,000; Three Rivers drill hall, $15,000.

(Continued in next issue.)

NEW COMPANIES.

Hunter Silver Cobalt Minlng Company, Limited, Ottawa, Ont., incorporated, capital $1,000,000. Directors, F. R. Latchford, W. L. Marler and J. J. Pheney.

Nova Scotia Silver Cobalt Mining Company, Limited, Toronto, Ont., incorporated, capital $2,000,000. Directors, B. E. Bull, J. Montgomery and W. R. Williams.

South River Skating Rink Company, Limited, South River, Ont., incorporated, capital $2,500. Directors, W. J. Ard, R. M. Carter, W. L. Lewis, J. F. Bellfoy and C. W. Miller.

Cobalt Union Mines, Limited, Toronto, Ont., incorporated, capital $1,000,000. Directors, J. A. Ferguson, J. S. Back and A. C. Armstrong.

A license has been granted the Olympia Gold Mining Company, incorporated under the laws of the Territory of Arizona, to carry on business in Ontario, capital to be used not to exceed $40,000. E. N. Armer, Toronto, Ont., is attorney.

Premier Asbestos Company, Limited, Montreal, Que., incorporated, capital $50,000. Incorporators, E. Languedoc, W. J. Henderson, A. C. Calder, C. T. Jette, and J. Jenkins, all of Montreal.

German Development Company, Limited, Ottawa, Ont., incorporated, capital $1,000,000. Incorporators, G. W. Buxestein, H. Dansiger, H. Craemer, all of Berlin, Germany, and O. E. Talbot, H. B. McGiverin, A. E. Barlow, and M. Cohn, all of Ottawa, Ont.

Dominion Chrome Company, Limited, Montreal, Que., incorporated, capital $20,000. Incorporators, H. W. Beauclerk, A. C. Calder, J. Jenkins, A. Savard and E. Languedoc, all of Montreal.

Mussens, Limited, Montreal, Que., incorporated, capital $500,000, to take over the business now carried on by W. H. C. Mussen & Company, railway, mining and municipal contractors' supplies. Incorporators, W. H. C. Mussen, G. Boulter, G. G. Foster, C. G. McKinnon and W. R. Staveley, all of Montreal.

Dominion Dredging Company, Limited, Ottawa, Ont., incorporated, capital $145,000. Incorporators, E. A. R. Larmonth, W. A. Cameron, E. R. McNeill, R. G. Stewart, and C. E. Stewart, all of Ottawa, Ont.

Miramichi Tanning & Fur Company, Limited, incorporated, capital $45,000. Incorporators, R. H. Wing, R. S. Robinowich, W. Damery, J. B. Beveridge, J. McDonald, C. Ruddock and H. B. McDonald, all of Chatham, N. B.

Stothart Mercantile Company, Limited, Newcastle, N.B., are seeking incorporation to operate saw mills and carry on a general lumber business.

J. F. Tilley, A. Myles, J. A. Hayden, A. W. Hay, all of Woodstock, N. B., and G. F. Burpee, of Avondale, N. B., will seek incorporation from the New Brunswick Government, as the Woodstock Cold Storage Company, Limited.

Perth Electric Company, Limited, Perth, N. B., are seeking incorporation. Promoters, W. Amies, S. J. Brown, J. W. McPhail, C. L. Olmstead and G. E. Armstrong, all of Perth, N. B.

The Exploration Company of Canada, Limited, Toronto, Ont., incorporated, capital $100,000. Directors, A. O. Beardmore, W. R. Johnston, H. C. Osborne, A. E. K. Evans and A. C. Macdonel.

North Cobalt Mining Company, Limited, Cobalt, Ont., incorporated, capital $50,000. Directors, H. von Hagen, E. O. Seeley, and W. G. Kennedy.

Cobalt Native Silver Mining Company, Limited, Haileybury, Ont., incorporated, capital $500,000. Directors, A. T. Budd, W. S. Mitchell and J. W. Kay.

Ruby Silver Mining & Development Company, Limited, Hamilton, Ont., incoporated, capital $500,000. Directors, S. J. Lloyd, W. S. Hutchinson, J. M. Peregrine, G. R. Lloyd and H. S. Lees.

The Gilbert Plains Curling & Skating Rink Company, Limited, Gilbert Plains, Man., incorporated, capital $5,000.

The Neva Development Company, Limited, Winnipeg, Man., incorporated, capital $100,000. Incorporators, W. S. Linnell, T. H. Johnston, of Winnipeg, Man., and others.

The Schofield Paper Company, Limited, St. John, N. B., will seek incorporation at the next session of the New Brunswick Government.

D. E. Adams Coal Company, Limited, Winnipeg, Man., incorporated, capital $100,000. Incorporators, D. E. Adams, H. E. Adams, D. Cameron, all of Winnipeg, and others.

The Noopka Marble Quarries, Limited, has been incorporated by the British Columbia Government with a capital of $150,000.

Beaver Lumber Company, Limited, Winnipeg, Man., incorporated, capital $3,000,000. Incorporators, J. Love, S. P. Clark, grain merchants, R. L. Gibson, H. Crowe, lumber merchants, all of Winnipeg, Man., and others.

General Metal Foundry & Machinery Company, Limited, Montreal, Que., incorporated, capital $199,900. Incorporators, M. E. Lymburner, St. Agathe, Que., L.M. Lymburner, H.N. Lymburner, both of Montreal, Que., and others.

Canada Cement Construction Company, Limited, Quebec, Que., incorporated, capital $100,000. Incorporators, J. A. Cote, D. W. Parante, E. Lamontagne, A. A. .G Gingras, J. Sampson, and J. A. Plante.

W. I. Kemp Company, Limited, Stratford, Ont.; incorporated, to manufacture agricultural implements, capital $300,000. Directors, W. I. Kemp, N. J. Kemp and J. S. Lewis.

Duuglass Mining Company, Limited, Toronto, Ont., capital $500,000. Directors, J. Douglas, C. S. Gzowski, J. Atwood, G. Laird, and J. A. Baggett.

Lorrain Mining Company, Limited, Toronto, Ont., incorporated, capital $400,000. Directors, G. H. Draper, C. McEachren, T. E. Smith, W. B. Laidlaw and A. H. Smith.

Cobalt & New Ontario Prospectors, Developers & Investors, Limited, Toronto, Ont., incorporated, capital $500,000. Directors, J. L. Ross, A. W. Holmsted, F. H. Potts, and A. R. Bickerstaff.

McCurry Manufacturing Company, Limited, Toronto, Ont., incorporated, to manufacture grocery sundries, capital $40,000. Directors, H. R. McCurry, J. Edwards, and J. McCurry.

Canadian Billing & Spencer, Limited, Brockville, Ont., incorporated, to manufacture tools and machinery, capital $200,000. Directors, J. G. Gardner, J. H. Botsford, and W. S. Buell.

Delta Lime Company, Limited, Delta, Ont., incorporated, capital $30,000. Directors, W. M. Cameron, F. H. Cameron, W. H. Wood, W. S. Buell and C. A. McNaughton.

Edward Cobalt Mines, Limited, Toronto, Ont., incorporated, capital $100,000. Directors, W. R. P. Parker, G. McP. Clark, J. A. McEvoy, G. Russell, and Ethyl M. Lindsay.

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ACCIDENT INSURANCE
Page
Ontario Accident Insurance Co. 19

BLUE PRINTS
Electric Blue Print Co. 7

BLOWERS
Buffalo Forge Co. 4

BRIDGES (CONCRETE)
Steel Concrete Co. 15

BRIDGES (STEEL)
Canadian Bridge Co. 19
Canada Foundry Co. 23
Dominion Bridge Co. 15
Jenks & Dresser 16
Phoenix Bridge and Iron Works 15

CEMENT
Alsen Portland Cement Co. 9
Bremner, Alex. 15
Currie & Co., W. & F. P. 20
DeSola, C. I 7
Gray & Bruce Portland Cement Co. 21
Hyde & Co., F. 22
Hanover Portland Cement Co. 19
Lakefield Portland Cement Co. 14
McNally & Co., W. 7
Morrison & Co., T. A. 20
National Portland Cement Co. 18
Owen Sound Portland Cement Co. 13
Ontario Portland Cement Co. 16
Raven Lake Portland Cement Co. 20
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Toronto Pottery Co. 22
Thorn Cement Co. 14

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United States Fidelity & Guaranty Co. 21

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Dartnell, E. F. 8
Hopkins & Co., F. H. 24
Ideal Concrete Machinery Co. 18
Mussen & Co., W. H. C. 3
Morrison & Co., T. A. 20
Toronto Pressed Steel Co. 7
Vining Bros. Mfg. Co. 5

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Beatty & Sons, M. 22
Canada Foundry Co. 23
Hopkins & Co., F. H. 24
Locomotive & Machine Co. 15
Mussen & Co., W. H. C. 3
Peat & Sons, James 14
Toronto Pressed Steel Co. 7

CONCRETE CONSTRUCTION
Ambursen Hydraulic Construction Co. 7
Loignon, A. & E. 7
Steel Concrete Co. 15

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Zarossi, Banco 15

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Metallic Roofing Co. 5
Pedlar People 22

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Allis-Chalmers-Bullock 11
Beatty & Sons, M. 22
Canada Foundry Co. 23
Dartnell, E. F. 8
Hopkins & Co., F. H. 24
Mussen & Co., W. H. C. 3
Morrison & Co. T. A. 20

DRILLING CONTRACTORS
Page
Harvey, J. 20
Peat & Sons, James 14

DEBENTURES
Nay, Anderson & Co. 22
Stimson & Co., G. A. 21

ENGINEERS AND CONTRACTORS
British Columbia General Contract Co. 23
Canadian White Co. 6

ENGINEERS (CIVIL)
Archibald, George H. 15
Chipman, Willis 17
Connor, Clarke & Monds 17
Davidson, Shirley 21
Davis, Johnston 15
Fenson, C. J. 16
Fielding, John S. 6, 13
Galt, John 7
Jackson, John H. 17
Lea & Coffin 17
Leofred, A. 6
McConnell, Brian D. 13
McDougall & McRae 7
Parke, Roderick J. 17
Scott, Wm. Fry 21
Simpson, T. T. 21

ENGINEERS (MECHANICAL)
Farmer, John T. 21
Galt, John 7

ENGINES
Allis-Chalmers-Bullock 11
Cameron & Co, Hugh 16
Sawyer & Massey Co 16

ELECTRICAL APPARATUS AND SUPPLIES
Allis-Chalmers-Bullock 11
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Drummond, McCall & Co 14
Northern Electric & Mfg. Co. 4

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Cameron & Co., Hugh 16
Meadows, George B., Toronto Wire, Iron & Brass Works Co. 9
McGregor & McIntyre 8
Seagrave, W. E., Walkerville, Ont. 16

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Allis-Chalmers-Bullock 11
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Canada Foundry Co. 23
Hood & Sons, Wm. 19
Hopkins & Co., F. H. 24
Mussen & Co., W. H. C. 3

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Canadian Fairbanks Co. 20
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McDougall Co., R. 21

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Locomotive & Machine Co. 15
Mussen & Co., W. H. C. 3
Sessenwein Bros. 7

PLASTER BOARDS
P. W. St. George 20

PILE DRIVING
Hood & Sons, Wm. 19
Russell, John E. 19

PAVING AND PAVING MATERIALS
Brunet, Joseph 17
Forest City Paving Co. 17
Ontario Asphalt Block Co. 17
Silica Barytic Stone Co. of Ontario 15
Warren Bituminous Paving Co. 7

PIPE (CAST IRON)
Page
Canada Foundry Co. 23
Gartshore-Thomson Pipe and Foundry Co. 9
Gaudry & Co., L. H. 7
Montreal Pipe Foundry Co. 9

PIPE (WOODEN)
Canadian Pipe Co. 9
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Heaman, George 23
Morrison & Co., T. A. 13
Sawyer & Massey Co 16

ROCK DRILLS
Allis-Chalmers-Bullock 11

ROPE
Allan, Whyte & Co. 21
Dominion Wire Rope Co. 24
Greening Wire Co., B. 21

STEEL BARS (CORRUGATED)
Corrugated Steel Bar Co. of Canada .. 16

STRUCTURAL IRON AND STEEL
Canada Foundry Co. 23
Dominion Bridge Co. 15
Jenks & Dresser 16
Locomotive & Machine Co. 15
McGregor & McIntyre 16
Phoenix Bridge & Iron Works 15

STONE
Crushed Stone, Limited 16
Doolittle & Wilcox 21

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Allis-Chalmers-Bullock 11
Beatty & Sons, M. 22
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Hopkins & Co., F. H. 24
Locomotive & Machine Co. 15
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Empress Silver Cobalt Mining Company, Limited, Toronto, Ont., incorporated, capital $500.000. Directors, J. W. McDonald, G. J. Valin, T. Brown, Margaret Cairncroft, and Gertrude E. Cherpaw.

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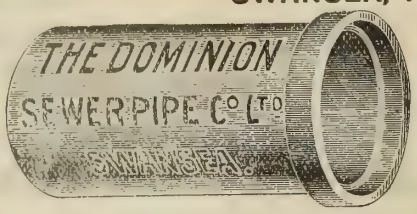

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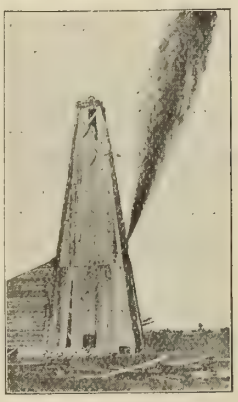

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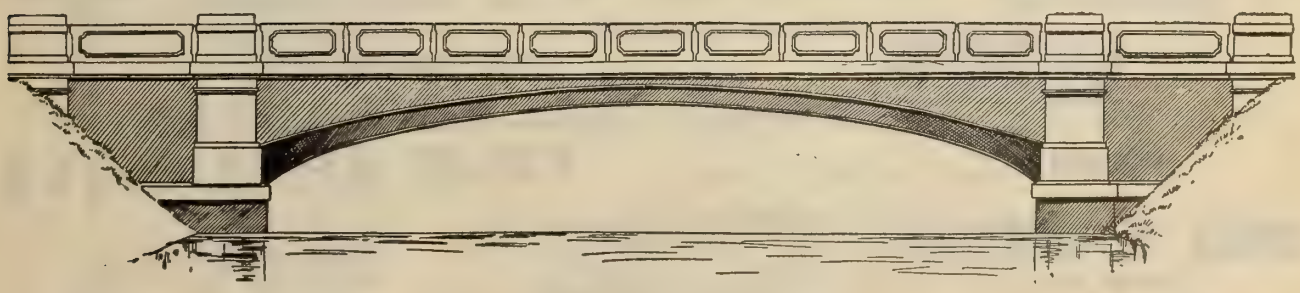

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Mr. R. H. Haas has resigned his position as general superintendent of the Dominion Engineering & Construction Company, of Montreal, and is at present on a business trip to New York, Pittsburg and the West. He expects to return to Montreal about the second week in January to resume a similar position as that held by him with the Dominion Engineering & Construction Company. Mr. H. F. Hass, superintendent of the Dominion Engineering & Construction Company, of Montreal, at the American Tobacco Company's new plant, has also severed his connection with the company.

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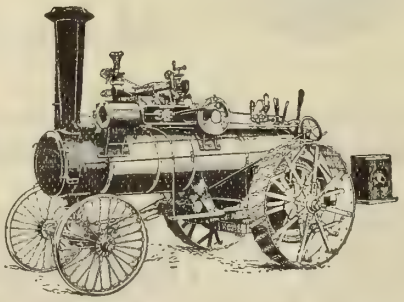
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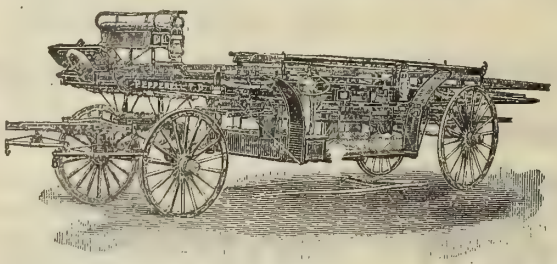
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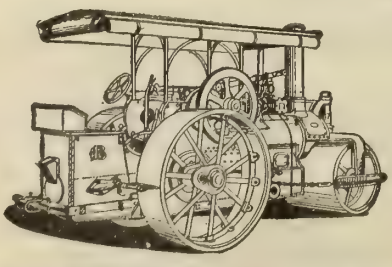
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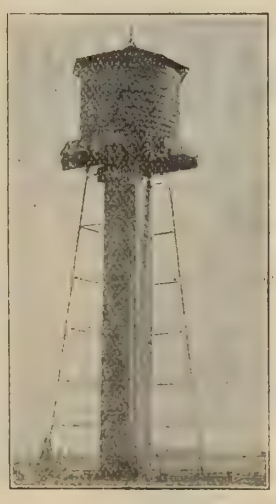

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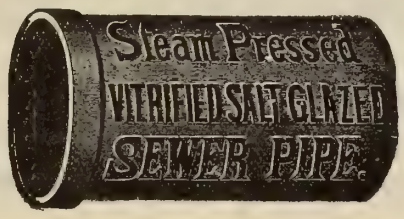

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							Neat.					3 (Sand) to 1 (Cement)				
					Initial	Final	1 dy.	7 dy. s.	28 dys.	3 mos.	1 yr.	1 dy.	7 dys.	28 dys.	3 mos.	1 yr.
1903	20	O.K.	3.135	2.1	162	345	307	701	783	827	*	74	214	299	367	*
1904	44	O.K.	3.150	2.0	132	342	300	744	848	914	938	86	262	354	401	427

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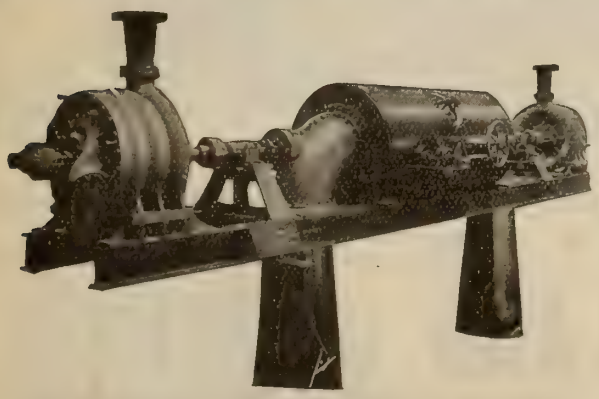

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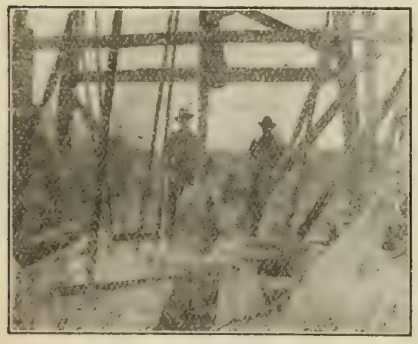

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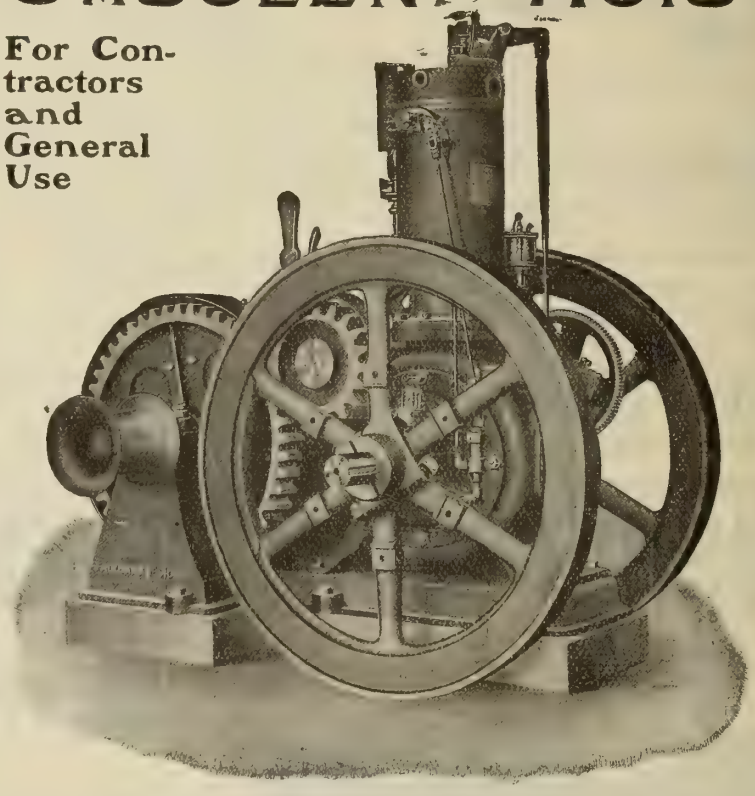

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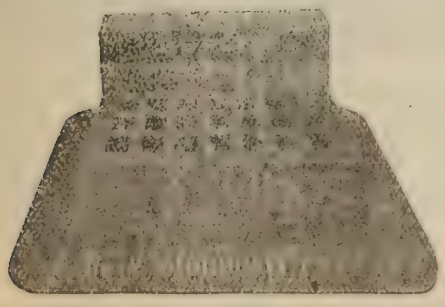

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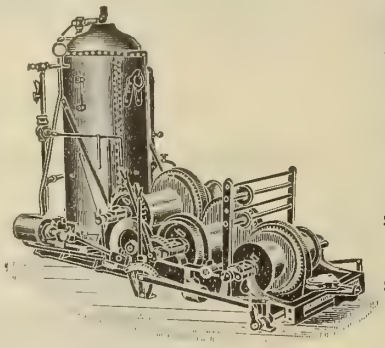

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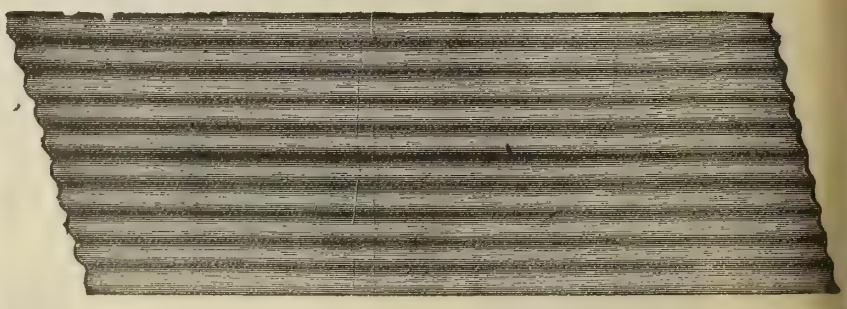

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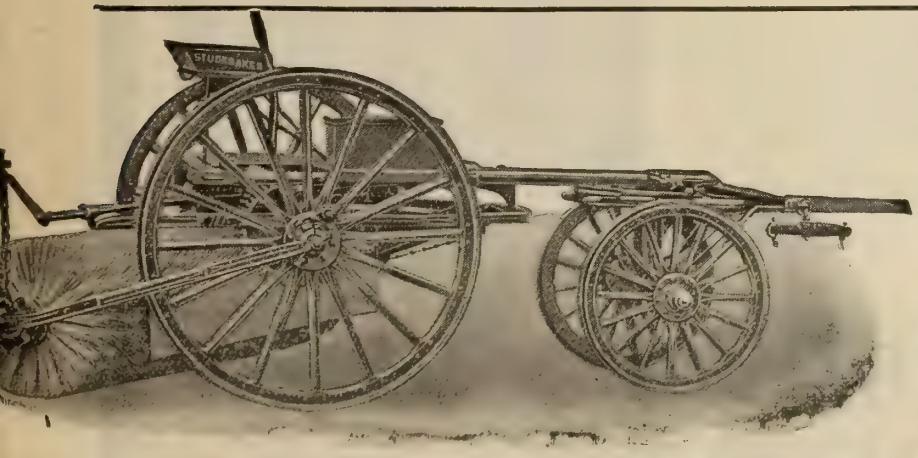

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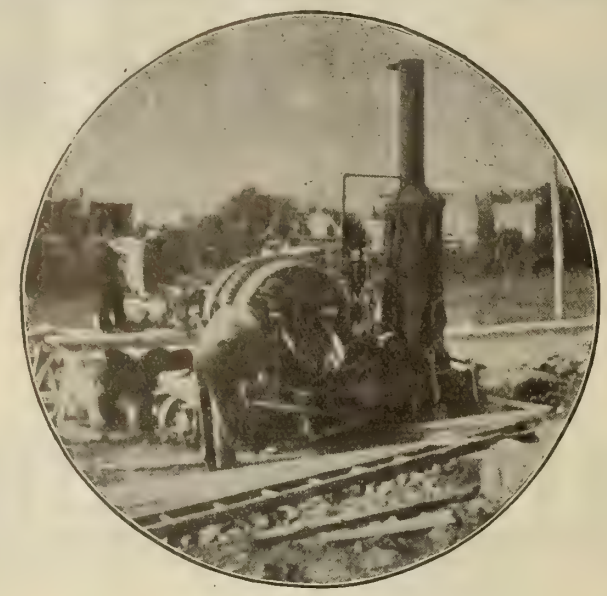

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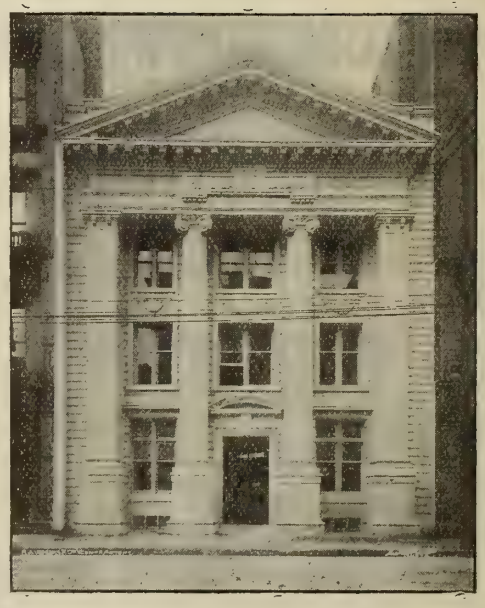

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VOL. 17. TORONTO, MONTREAL — DECEMBER 19, 1906 — WINNIPEG, VANCOUVER No. 42

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By order,
FRED. GELINAS,
Secretary.

Department of Public Works,
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Sealed tenders addressed to the Chairman of the Fire, Water and Light Committee for the supply of thirty miles of assorted water pipe and quantity of specials for the City Water Works, will be received at the office of the undersigned up to 2 30 p.m. on

FRIDAY, MARCH 1, 1907.

Specifications and forms of tender may be obtained at the office of H. N Ruttan, City Engineer, Winnipeg, Man.

Each tender must be accompanied by an accepted cheque or draft payable to the order of the City Treasurer, or cash deposit for the sum called for in the form of tender supplied, which will be subject to forfeiture in case or failure on the part of the contractor to enter into a written contract with approved sureties if called upon to do so.

The city reserves the right to reject any or all tenders or to accept any bid which appears advantageous to the City of Winnipeg.

C. J. BROWN,
City Clerk.

City Clerk's Office, Winnipeg, December 8, 1906.

TENDERS FOR

MUNICIPAL ASPHALT PAVING PLANT AND EQUIPMENT.

Tenders will be received by registered post only, addressed to the Chairman of the Board of Control, City Hall, Toronto, Ontario, up to noon on TUESDAY, JANUARY 8TH, 1907, for the supplying and erection of a municipal asphalt paving plant and equipment for the City of Toronto.

Envelopes containing tenders must be plainly marked on the outside as to contents.

Specifications may be seen and forms of tender obtained at the office of the City Engineer, Toronto.

The usual conditions relating to tendering, as prescribed by city by-laws, must be strictly complied with.

The lowest or any tender not necessarily accepted.

EMERSON COATSWORTH, Mayor,
Chairman Board of Control.

City Hall, Toronto, December 11th, 1906.

W. Mars and F. J. Jugo, contractors, of Montreal, Que., have registered as Mars & Jugo.

H. R. Ritchey Company, Limited Montreal, Que., incorporated, to manufacture engineer's plumber's and electrical supplies, capital $20,000. Incorporators, H. R. Ritchey, A. L. Ritchey, G W. Elliott, and T. P. Butler, all of Montreal.

CONTRACTS OPEN.

WHITBY, ONT.—The National Car Company will locate their works here.

PICTON, ONT.—W. V. Spencer will build a residence on Ferguson street next spring.

ST. HYACINTHE, QUE.—It is reported that the Barsalou bridge is to be rebuilt.

BERLIN, ONT.—Debentures will be issued for $9,000 for improvements to sewer farm.

PORT ARTHUR, ONT.—W. A. Burrows will erect a 40 foot brick addition to his block.

CHILLIWACK, B. C.—The trustees of the Methodist church have decided to erect a new edifice.

PEMBROKE, ONT. — The Town Council have decided to spend $50,000 for a new intake pipe.

HESPELER, ONT.—Alderman Groh has purchased property on which to erect two three-storey blocks.

DURHAM, ONT. — The National Cement Company will erect a storage building 250 by 50 feet.

OWEN SOUND, ONT. — Debentures will be issued for $5,000 with which to esatablish a live stock yard.

FRASERVILLE, QUE.—J.O. Landrey and F. X. Berube are about to open a foundry and machine shop here.

ST. CATHARINES, ONT.—Improvements will be made to the International block by Thomas Irvine, of St. Paul.

ELMIRA, ONT.—The by-law to raise $25,000 for installation of a waterworks system has been carried by the ratepayers.

REVELSTOKE, B.C.—The Canadian Pacific Railway are taking tenders for the erection of shops, cost of which will be $20,000.

CARLYLE, MAN.—G. W. Stockton Company have purchased property on on which to erect a two storey brick block.

LIVERPOOL, N. S.—Tenders will be received up to January 5, 1907, for the purchase of $11,200 4½ per cent. 30-year debentures.

NIAGARA FALLS, ONT.—John Logan has purchased property here, and will erect a two storey office and lodge room thereon.

LONDON, ONT.—The Council of the County of Middlesex will issue debentures for $20,000 to redeem those outstanding at present.

FERNIE, B. C.—Reports are being made for the Crow's Nest Pass Coal Co. as to the feasibility of developing power from the Elk river.

LONDON, ONT.—The City Council in conjunction with the County Council, will erect a new court house and city hall, to cost $100,000.

ARTHUR, ONT.—The Village Council are having a report prepared by an engineer in reference to the installation of a waterworks system.

MEDICINE HAT, ALTA.—Tenders are being taken by J. L. Brown, Royal Hotel, for brick work and foundation for the new Great Northern Hotel.

BRANTFORD, ONT.—Willis Chipman, C.E., Toronto, Ont., is about to prepare a report on the proposed work to be done at the pumping station.

NAPANEE, ONT.—The ratepayers will vote on January 7th next on the question of spending $5,000 for the laying of a sewer on Dundas street.

TWEED, ONT.—A by-law will be voted on by the ratepayers to provide for the construction of a trunk sewer and the issuance of $10,000 debentures therefor.

WATERLOO, ONT. — The ratepayers will be asked to authorize the issuing of $23,000 debentures for extending and improving the sewerage system.

ARVA, ONT.—The Council of the Township of London will issue debentures for $15,000 for construction and repair of bridges throughout the township.

VIRDEN, MAN. — Providing the ratepayers authorize the erection of a new school house at a cost of $5,000, debentures for that amount will be issued.

MEDICINE HAT.—L. H. Shepley, Winnipeg, Man., representing a party of capitalists who recently visited this town contemplate investing $50,000 in a greenhouse plant.

HAMILTON, ONT.—F. H. Hall is about to erect two houses on Pine street to cost $3,200.—The Y.M.C.A. authorities are considering the question of erecting a new building.

ST. JOHNS, QUE.—The question of either purchasing the present waterworks system or installing a new one at a cost of $125,000, is being discussed by the Town Council.

STRATFORD, ONT. — The ratepayers will vote on a by-law for the construction of a trunk sewer, cost $16,000. —The Grand Trunk Railway will erect a new station here.

PORT PERRY, ONT.—A deputation from this town recently waited on the Provincial Government seeking permission to develop power at Buckhorn Rapids on the Trent river.

MORRISBURG, ONT. — A deputation representing the County of Dundas recently waited on the Provincial Government in reference to the installation of a drainage system in the country.

FORT FRANCES, ONT. — The Town Council will submit a by-law to the ratepayers for a further expenditure of $12,500 in connection with the installation of the waterworks system.

SASKATOON, SASK.—Plans have been prepared for a stone and brick block to be erected by Sutherlond & Jordon, to have a frontage of 50 feet and to consist of two stories and basement.

RICHMOND, QUE.—It is probable that the Boston Last Company will erect two new buildings, install new engines and a 500 h. p. boiler, in connection with proposed extensive improvements.

LISTOWEL, ONT.—The ratepayers will vote on a by-law on January 7, 1907, for the construction of four bridges in the town at a cost of $14,500. If carried debentures for this amount will be issued.

GLACE BAY, N. S.—The question of erecting a public building here has been brought before the Dominion Goverment and it is reported that a site has been alredy been acquired therefor.

KENORA, ONT.—It is probable that a large hotel will be erected here at a cost of $100,000. C. C. Delridge, on behalf of the promoters, having applied to the Town Council for several concessions.

WOODSTOCK, ONT. — By-laws will be submitted to the ratepayers for authority to expend $20,000 for extensions and improvements to the Collegiate Institute and $15,500 for the surface drainage scheme.

TRURO, N. S.—The Dominion Carriage Company have had plans prepared for the erection of several large buildings.—The Streets Committee have recommended the purchase of a stone crusher and steam roller.

VICTORIA, B. C.—Plans are about to be prepared for a large apartment house to be erected for J. M. McLuckie and A. J. Kappelie, of Vancouver.—The building will be six stories, reinforced concrete with trimmings of pressed brick, estimated cost $75,000.

GODERICH, ONT.—At the meeting of the Council of Huron County held recently, the County Engineer recommended the construction of two bridges, one at Bluevale, the other north of Bayfield. The bridges are to be steel with cement abutments, and tenders are to be called for shortly.

PRINCE ALBERT, SASK.—C. H. Mitchell, C.E., Niagara Falls, Ont., is making a report as to the feasibility of developing power from Cole Falls, Shell river and Little Red river.—The School Board will erect an addition to the present school house, and intend building a new brick school house in the near future.

CALGARY, ALTA.—Wade & McGiffin are about to erect a four storey brick block corner of First street west and Eleventh avenue.—A brick block is also to be erected corner of First street west and Tenth avenue by T.S.C. Lee.—The E. B. Eddy Company, Hull, Que., are considering the question of establishing a branch factory here.

NEW WESTMINSTER, B.C.—It is reported that the town council for next year will deal with the question of constructing a bridge to Lulu Island, at an estimated cost of $10,000.—The Victor Cement and Machine Company, of Vancouver, are negotiating for the purchase of a site on which to erect a building for the manufacture of cement blocks.

QUEBEC, QUE.—N. Dion has taken a permit for the erection of a building, cost $2,000.—The demolishment of the Chateau Frontenac is to be commenced about January 15, 1907, in order to have the new building finished by June, 1908.—The City Council are discussing the question of spending $325,000 for paving streets, and improvements to waterworks drainage systems.

MONCTON, N. B.—The Intercolonial Railway will develop power in the Petitcodiac river. By the use of a system of basins it is thought that continuous power can be obtained at all stages of the tide. Besides developing power for the workshops, sufficient will be developed to supply the city for lighting purposes.

HALIFAX, N. S.—Negotiations are on foot for the establishment of large car works here.—The wood-working business of Silliker & Company, Amherst, will be brought here and operated in connection therewith. The Sillikers will be heavy shareholders. — The Board of Works have decided not to accept any of the tenders submitted for the erection of an engine house on Morris street.—Tenders will shortly be taken for electric lighting.

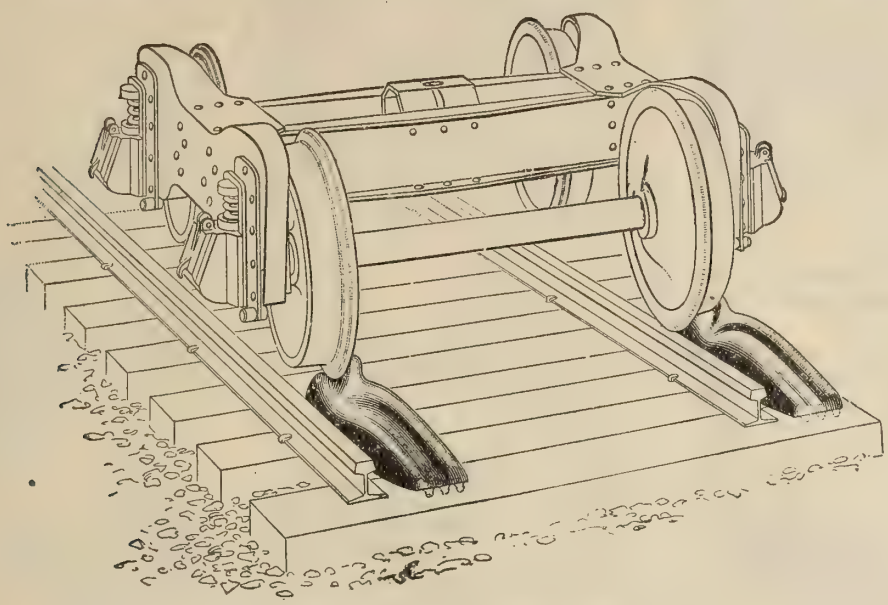
ST. JOHN, N.B.—Capitalists. among whom are T.H. Estabrooks, J.A. Likely, R.G. Haley, J. Pender and W.S. Fisher, are interested in the proposed car works to be operated here. Options have been secured on several blocks of land and matters are ready for taking a definite shape.—A large block of land opposite the Customs House has been purchased by J. F. Gleeson, real estate agent, who is acting for local and Montreal capitalists.

WINNIPEG, MAN.—Plans have been preparrd for large additions to be made to the buildings of the Western Canada Flour Mills.—The Provincial Government have decided to grant $125,000 for the building of a bridge across the Red river.—V. W. Horwood, architect, has prepared plans for an apartment house for James Ryan, jr.—The J. Leslie Furniture Company's building has been sold and will be converted into a hotel.—Tenders will shortly be taken by the Board of Works for the following improvements: Sewer, Arnold avenue, Pembina to John streets, cost $3,578; creosoted block pavement, Dufferin avenue, Parr street to Sinclair street, cost $27,875; granolithic walk, Oakwood avenue, Pembina to Fisher streets, cost $2,480; cedar block pavement, on Government road allowance, Notre Dame avenue to Nuisance ground, cost $6,300. —It is announced that the Canadian Pacific Railway will construct a branch from Bredenburg, via Stoney Creek, to Kamsack.—The members of St. Andrews society, of this city, have decided to erect a new hall.—W. A. Irish has purchased property corner Notre Dame avenue and Princess street on which to erect a block of buildings.

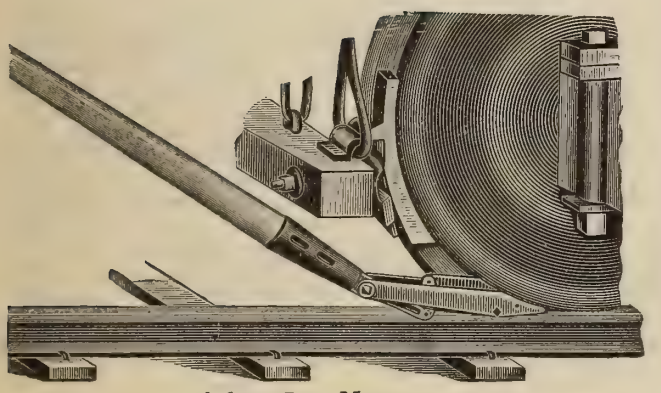
VANCOUVER, B. C.—Tenders will be received up to December 21 by the Market and Industries Committee for construction of a wharf.—Tenders will shortly be taken for the supply of valves, galvanized fittings and pig lead.—The following building permits have been issued: W. Walsh, brick block, cost $26,000; D.E. Harris, two houses, cost $3,000; flour mill for Vancouver Flour and Milling Company, Smith street, cost $25,000; Provincial Government, addition to courthouse, $2,500; Captain Tatlow, additional storey on block adjoining Bank of British North America, Hastings street, cost $4,500.—The City Engineer, has recommended the laying of a sewer on Heather street, from Twelfth to Sixteenth avenue, cost $2,300.—The Windsor hotel is to be remodelled into a Salvation Army home.—The King Edward hotel is to be enlarged at a cost of $15,000.—Parr & Fee, architects, are taking tenders for the construction of a brick block to be erected on Pender street for W. H. Massey.—The same architects, have prepared plans for three dwellings for W. McNeish. The houses will be erected corner Melville and Thurlow streets, and will cost $10,000.—A. E. Carter has taken a permit for the erection of a three storey garage for the Vancouver Automobile Company, to cost $15,000.

MONTREAL, QUE.,—The Grand Trunk Railway are considering the advisability of raising their tracks from Bonaventure station to the city limits, in order to do away with level crossings. If this scheme is carried out the probability is that a new station will be erected. The total cost of the improvements will be about $3,000,000.—Allis-Chalmers Bullock, Limited, have purchased a piece of property at Rockfield, having a frontage of 400 feet, for extensions to their premises.—Tenders have been taken for steel, galvanized iron and stone work, timber, painting and glazing, in connection with erection of steel shelters at Bonsecours market.—The Montreal Dispensary have purchased a building, corner

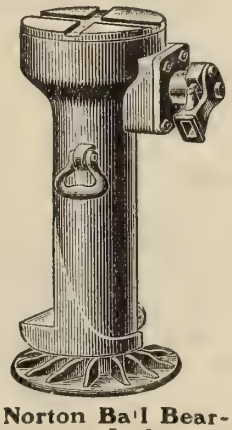
Railroad Supplies



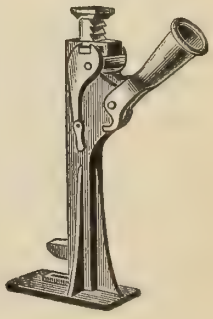
Alexander Car Replacers.



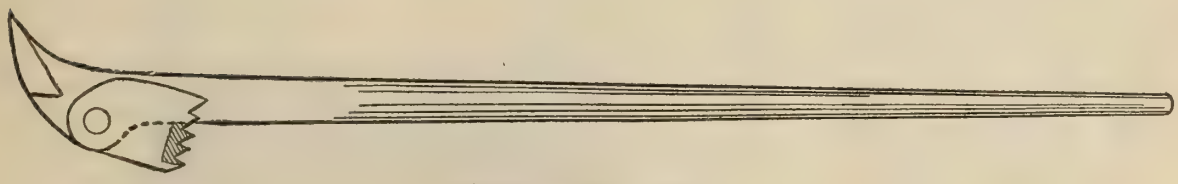
Atlas Car Movers.



Norton Ball Bearing Jacks.



Norton Track Jacks.



Norton Spike Pullers.

HAND CARS
PUSH CARS
VELOCIPEDES

LIGHT RAILS
RAILWAY SPIKES
TRACK BOLTS

TRACK DRILLS
TRACK TOOLS
WHEELBARROWS

W.H.C.MUSSEN & CO.

MONTREAL

Inspector and St. Antoine streets, and will extend same at a cost of $10,000.—The Catholic School Board have taken over the St. Joseph Parish school, which will be demolished and a more modern building erected.—The Crescent Turkish Bath Company have signified their intention to erect a building to cost $100,000.—It is reported that the Canadian Pacific Railway will construct a double track on their line from Vandreuil to Smith's Falls.—The Ottawa Valley Railway will construct a road from here to Ottawa and westward, a total distance of over 300 miles.—Building permits have been issued as follows: Montreal Amusement Company, house, St. Catharines, cost $10,000; Comte Phil, dwelling, Drolet street, cost $1,200; Chas. Dagenais, office building, Marquette and Marie Ann, cost $5,000; J. Chaput, dwelling, Montgomery street, cost $1,500; T. J. Taubin, dwelling, Huntly street, cost $1,800.—L. E. Ouimett recently purchased 5,000 square feet of land on St. Catherine street east.

OTTAWA, ONT.—The Ontario Railway & Municipal Board have approved of the by-law for extensions to the Civic Electric plant, to cost $50,000.—The plans for the proposed Grand Trunk hotel and central depot have been submitted to the Government.—Architect Noffke has submitted five sets of plans for the reconstruction of the City Hall.—The cost ranges from $40,000 to $150,000.—The Transcontinental Railway Commission will shortly invite tenders for the construction of 390 miles of new road.—F. Gelinas, Secretary of the department of Public Works, will receive tenders as follows: Up to December 22, for heating system, for post office at Iberville, Que.; up to December 27, for heating system, for Immigration building, Edmonton, Alta.; up to January 7, 1907, for concon-construction of landing pier at Doucet's Landing, Que.; up to January, 5, 1907, for construction of a breakwater at Phinney's Cove, N. S.; up to January 7, 1907, for construction of a wharf at Point Prim Island, P.E.I.—Competitive drawings will be received up to April 15, 1907, for Departmental and Justice buildings to be erected for the Dominion Goverment here. The competition is open to Canadian architects who have been residents in Canada for one year or more. The author of the best design will be awarded $8,000; second $4,000; third $2,000, and fourth $1,000.—The Department of marine and Fisheries have under consideration plans for lighting of St. Lawrence river from Quebec to the gulf. They propose to erect steel towers with powerful lights along the north and south coasts, place lightships at Matane and on the reef at Fame Point and erect lighthouses and place foghorns at Cape George, Point Rich and St. Marys Islands.—A new Y.M.C.A. building is to be erected at corner Metcalfe street and Laurier aveuue. The building will consist of five storeys and basement and plans are now being prepared by an American firm of architects who are represented here by J. H. Ewart.

TORONTO, ONT.—Thos. Ogilvie & Sons are about to erect a five-story fire proof warehouse corner Bay and Wellington street to cost $100,00.—The Board of Control have authorized the City Engineer to call for tenders for a hydraulic dredge.—Tenders will be received up to January 8th, for the supply and erection of a municipal asphalt paving plant.—Extensive alterations will be made to the lodging house corner Peter and Wellington streets, which was recently purchased by the Government for the accommodation of immigrants.—The Toronto Musical Protective Union have purchased property on Simcoe street on which to erect a headquarters building.—The City Council give notice that the following works will be carried out: Asphalt pavement, Manning avenue, Bloor street to north end, cost $20,192; Macdonell avenue, Queen street to north end, cost $15,112; resurfacing, Mincing lane, Wellington street to 218 feet north, cost $967.00.—The date for the reception of tenders for the erection of the grand stand and horticultural building on the exhibition grounds has been extended to Thursday, December 20th.—H. Weinburg has purchased a site corner of Agnes and Elizabeth streets on which he proposes to erect a five story apartment house to cost $40,000.—The Canadian Rubber Company, Montreal, Que., have purchased property on Adelaide street west of Bay, having a frontage of 35 feet and a depth of 104 feet.—The Board of Control have received the report of the City Architect on the proposed new Police station on Pape avenue. The estimated cost is $23,500 and the Board have decided to leave the matter for next year's Council to deal with.—Tenders are wanted at 77 Victoria street for brick and stone work on a house.—The officials of the Girl's Home have asked the Board of Control to grant $6,000 for the erection of an addition to their premises.—City Engineer has recommended that the following concrete sidewalks be laid:—Yarmouth road from Christie to Shaw streets, cost, $1,208; Northern place, from Shirley to south end, $281; Dearbourne avenue, from Broadview to Bowden, $1,254; Barrett avenue, from Conduit to 265 feet south, $423; Summerhill avenue, from 180 feet east Ottawa to Shaftesbury $661; Pembroke, from Wilton Crescent to Shuter, $1,046,00; Bathurst, from Arthur to College, $2,134,00; Clinton, from Yarmouth to Dupont, $817,00; Cornwall, from River to 450 ft. east, $745; and also the following pavements: Asphalt, Lennox street, from Bathurst to to Borden, cost $3,559; Clinton street, Bloor street to Barton, cost $5,437; Delaware avenue, from Shanley to Hallam, $7,094; Dearbourne avenue, from Broadview avenue, to Bowden street, $7,224; Brick, Lane 13 feet wide, between Edward and Elm streets, from Chestnut to Centre, $959; Foster place, from Elizabeth street to east end, $1,151; Bitulithic, Henderson avenue, from Clinton to Grace, $2,834; Dagmar avenue, from Paper to 175 feet east, to Brooklyn avenue, $5.020; Macadam, Queens Park crescent, from College to Bloor, $5,993; Hogarth avenue, from Broadview to Logan, $15,514.—It is probable that Baptist churches will be erected on Waverley Road and Pape avenue.—The congregation of Kenilworth avenue Baptist church will erect an edifice to cost $12,000.—Dr. Sheard, City Health Officer, has recommended the erection of an additional crematory, and also the enlargement of eastern stables. The estimate cost of the works is $48,000.—Two lots on corner of Huron and Cecil streets have been sold to J. J. Walsh, who purposes erecting houses thereon.—The following building permits have been issued: Hunt Bros., 3 attached 2 storey brick dwellings, 18 Lynd avenue, cost $6,000; Kay Bros., 2 pair semi-detached 2½ storey brick dwellings, Delaware avenue, cost $10,000; Macpherson Estate, 2 storey brick and stone dwelling, Roxboro street, cost $5,500; Mrs. Lester, one pair semi-detached two storey brick stores and dwellings, Bloor street, cost $4,700; John Elloner, 4 detached 1½ storey roughcast dwellings, Withrow avenue, cost $2,000; F. R. Baumhard, pair semi-detached 2½ storey brick dwellings, 11-13 Rusholme road, cost $7,000; Geo. Philips, 3 detached 2 storey brick dwellings, Brunswick avenue, cost $10,000; Home for Incurables, 1 storey brick addition, 130 Dunn avenue, cost $6,700; R. H. Smith, 2 storey and attic brick dwelling, corner Rusholme road and Hepbourne street, cost $2,700; Wm. Murray, 2 storey and attic brick dwelling, Kendall avenue, cost $4,000; Geo. Phillips, 4 pair semi-detached 2 storey and attic brick dwellings, Brunswick avenue, cost $22,000; B. Cheadle, 2½ storey brick dwelling, Ossington avenue, cost $3,000; King Bros., 6 attached 2 storey roughcast dwellings, brick fronts, Perth avenue, cost $9,000; John Bell, 2 storey and attic brick dwelling, 35 Humberside avenue, cost $2,500; S. D. Rainey, 3 storey brick hotel, corner Queen and Carroll streets, cost $15,000; H. M. East, 2 storey brick dwelling, Sussex avenue, cost $2,000; Walter Davidson & Co., 1 storey brick factory, 139-141 Front street east, cost $19,400; James Paul & Sons, pair 2 storey frame dwellings, brick fronts, corner Hallam street and Preston avenue, cost $2,800; William Halls, 2 storey and attic brick dwelling, Indian road, cost $4,000; W. P. Campbell, 2 detached 2 storey roughcast dwellings, brick fronts, 130 Bolton avenue, cost $3,000; Alexander Bowling Club, 2 storey brick and stone club house, Kendal avenue, cost $2,500; Canadian Oil Company, 2 storey brick addition to factory, 2-12 Strachan avenue, cost $20,000; Wm. Rutlege, 2 storey and attic brick and stone dwelling, Grace street, cost $3,000.

CONTRACTS AWARDED.

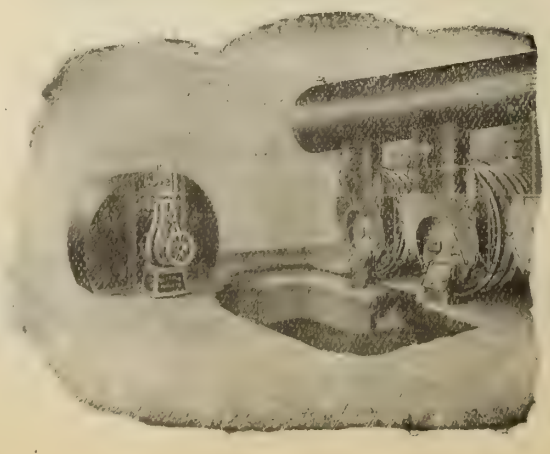
SASKATOON, SASK. — Excavation necessary for new hospital building: J. Davies, Saskatoon, contractor.

ROSTHERNE, SASK.—$3,000 10 year 5% debentures: awarded to W. S. Evans, Winnipeg, Man, at $3028,40.

STRATHCONA, ALTA.—Switchboard for electric light plant: Canadian Westinghouse Company, Hamilton, Ont.

SYDNEY MINES, N. S.—Erection of a gymnasium building for Y.M.C.A.: Mr. King, successful enderer at $1,910.

COATICOOK, QUE.—Erection of a d



MECHANICAL DRAFT

Short Stacks
Positive Draft
Saves Fuel
Burns Cheap Coal
Constant Steam Pressure
Independent of Weather

Catalogue ?

CANADIAN BUFFALO FORGE COMPANY, LTD.
MONTREAL, QUE.

dition to convent: Woodwork, Simoneau & Dion, Sherbrooke at $12,750; stonework, Mr. Walsh, this place, $6,300

PRINCE ALBERT, SASK.—Supply of 1,500 feet of "Broncho" fire hose: Canadian Rubber Company, Montreal, Que., successful tenderers at 70 cents per foot.—Supply of hook and ladder fire wagon with necessary apparatus: W. E. Seagrave, Walkerville, Ont., successful tenderer, at $2,160.

TORONTO, ONT.—The Property Committee of the Board of Education has awarded the following contracts: Electric fixtures in Jamieson Avenue Collegiate Institute, McDonald & Wilson, for $334.85; fitting up teachers' room and lavatories, Elizabeth street school, Maxwell & Johnston, for $282; in Palmerston avenue and Dovercourt schools, Fred Armstrong, for $115 and $175 respectively; gas fixtures in Huron street and Cottingham street schools, Fred Armstrong, for $127 and $75 respectively.

BIDS.

The following tenders were received for the supply of steel pipe for the city of Vancouver: G. A. Walkem & Company, 15 inch. $3.60 per foot, 10 inch, $2.10 per foot, fittings 6⅝ cents per pound; Boyd, Burns & Company converse lock joint pipe, 15 inch, $205.95 per hundred pounds, specials, .06¼ cents per pound; C. F. Jackson & Company, 10 inch, $4,570 for 4,600 feet; cast iron nine foot lengths, $5,200, 12 foot lengths, $5,324, specials, $185,00; Vancouver Engineering Works, 15 inch, $2.28 per foot, specials $5,00 per hundred pounds.

J. H. Rich and J. P. Regan, contractors, of Hosmer, B.C., have dissolved partnership.

CORRUGATED
WRITE FOR PRICES
METALLIC ROOFING Co
LIMITED
TORONTO, CANADA.
IRON

"BULL DOG" SHOVELS

forged from one piece of High Carbon Bar Steel without weld or rivet, solid neck and blade, tempered in oil, straight chucked handle can be replaced when broken.

CANADIAN SHOVEL & TOOL CO.
WRITE FOR CATALOGUE LIMITED HAMILTON, CANADA

Sectional View of finished One-piece Shovel, showing gauge or thickness of steel at different points

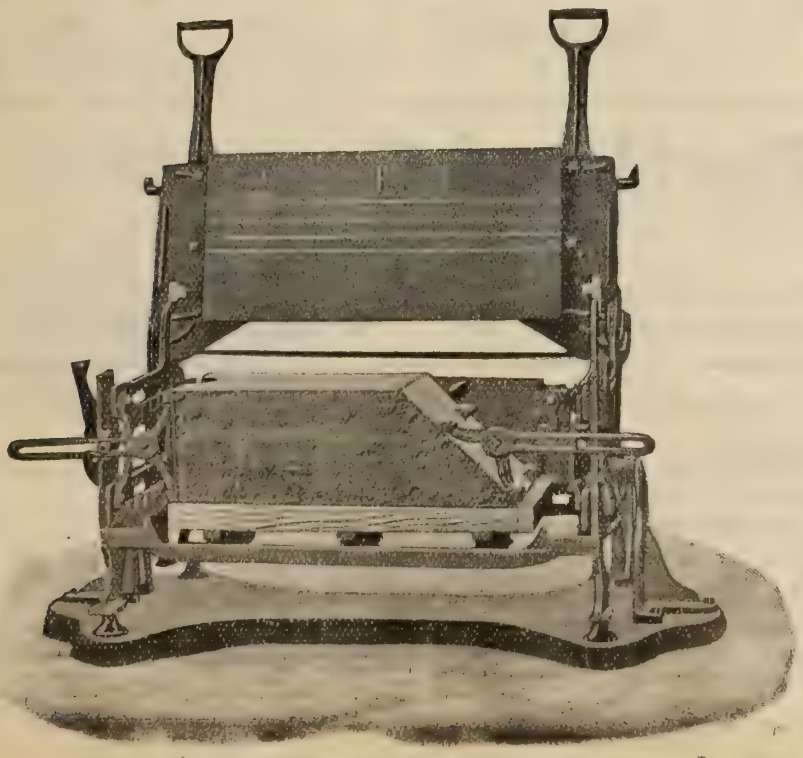
Note Solid Shank

. . . Speaks For Itself . . .

THE MILES CONCRETE BUILDING BLOCK MACHINE

Makes 40 Different Sizes of Stone in Any Design, as well as the Specials, viz.:
Water Table, Gable, Circle, Angle, Chimney, Cornice, Pier Blocks, etc

Catalogues and Information Cheerfully Furnished.



This Machine makes all blocks face down—"the only practical way"—allowing of a richer and finer facing, producing blocks that are perfect in appearance and impervious to moisture.

Let us tell you how the "Miles" will pay for itself over any other machine in three months' operation.

Manufactured and Sold by

VINING BROS. M'f'g. Co.

Niagara Falls. - Can.

BURNT CLAY FOR HIGHWAYS.

The United States Congress some time ago established an office of public roads, which is instructed to conduct experiments and device methods for improving the roads of the United States. The office has done a great deal to arouse interest throughout the country in the necessity of good roads and has originated several means of making good roads economically. The latest discovery is that of burning clay roads in Mississippi.

In large areas in the south, particularly in the valleys of the Mississippi tributaries, sedimentary clays are found very generally. In these areas there is little or no sand and the clays are of a particular plastic and sticky variety. These sticky clays are locally known as "gumbo" and "buckshot." In such localities traffic is absolutely impossible during the wet season, as the wheels of heavy vehicles will sink to the hub.

The clay is black, owing to the high percentage of organic or vegetable matter it contains. It is particularly sticky in its nature and is all most wholly free from sand and grit. After it has been burned, however, the plasicity is destroyed and a light clinker formed, which though not particularly hard, when pulverized, forms a smooth surface and seems to wear well.

CONCRETE IS FREE FROM INSECTS

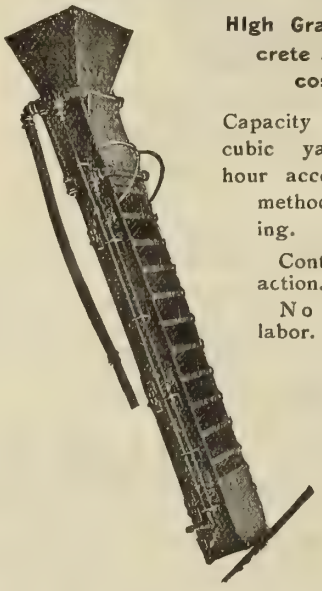
Sudden and permanent conversions to the use of concrete are being made by men who have much to do with pile-driving in salt water, particularly on the western coast of America. It is estimated in California that a stick of timber, rough sawed, will endure about eight months; a pile that is peeled has a year's lease of life; with the bark on, this period is increased to eighteen months, and creosoting gives wood a life of from fifteen to as many years.

Even creosote is not potent to resist the attacks of the teredo, or "borer,' and the limnoria. These organisms play havoc with any wood placed in salt water and frequently cause the utter destruction of the fibres. They seem at times to thrive on creosote, which speaks well for the strength of their degestions. There is a great uncertainty about then attack, as of two piles standing comparatively near together one may be riddled, while the other escapes. These considerations are another reason for using concrete piles when there is underpinning to be done, on land or sea.

Mr. A E. Killam, Inspector of Bridges and Building I.C.R. Moncton, N. B., was elected Chairman of the Executive Committee of the Association of Railway Superintendents of Bridges and Buildings, at the annual convention recently held at Salt Lake City, Utah.

Young Wife — "The landlord says he'll paper the bedroom, but will have to put it on over the old paper and not scrape the walls." Husband—"Well that's all right." Young Wife— "But think, that room is much too small already."—American Spectator.

THE PORTABLE GRAVITY CONCRETE MIXER



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FIRES.

Whitewater Hotel, Whitewater, B. C., loss $2 000.—Residence and outbuildings owned by A. Saveria, Waterloo, Que., loss $10,000.— Factory of Winnipeg Saddlery Company, Winnipeg, Man., loss $60,000.—Building owned by Forman Estate, Londonderry, N. S., loss $20,000. —Warehouse of Lake of the Woods Milling Company, Winnipeg, Man., damage $10 000.

Drug store of M. Albert, 273 St. Lawrence street, Montreal, damage $2,000.—Commercial Hotel, Campbellton, N. B., loss $6,000 —Buildings owned by F. B. Miller, W. R. Rice and others, Bear River. N. S., loss $7,300.—City incinerator, Winnipeg, Man., damage $4,000.—Hotel Belmont, St. Agathe, Que., loss $8,000.—The Parish block, Strathcona, Alta., totally destroyed.—Fernbrook's dry goods store, Chatham, Ont., owned by J. Desmond, loss in neighborhood of $1.200. —A. E. McDermott's liquor store, Cranbrook, B. C., building owned by J. Jackson, loss $5,000.

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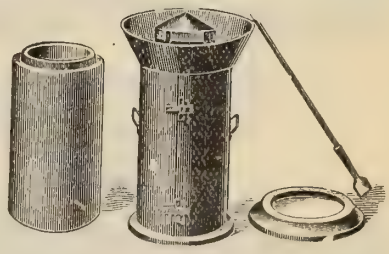

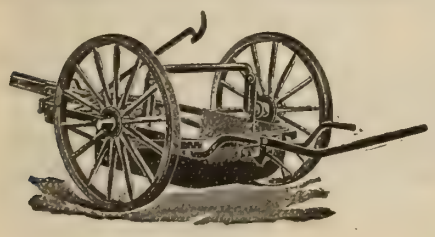

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CONCRETE DAM AT HESPELER, ONTARIO

We present herewith views of a concrete dam recently constructed for the R. Forbes Company at Hespeler, Ont. The bed of the stream at the site of the dam is a formation of hard unstratified limestone, forming an ideal sub-base for the concrete structure.

Fig. 1.—View of Face of R. Forbes Dam.

Fig. 2.—Upstream Side of Dam Before Backed up with Stone.

The old dam was a modern structure with knee frames and stone filling and was thought to be unsafe, and also leaked and failed to hold the water at a time when most needed.

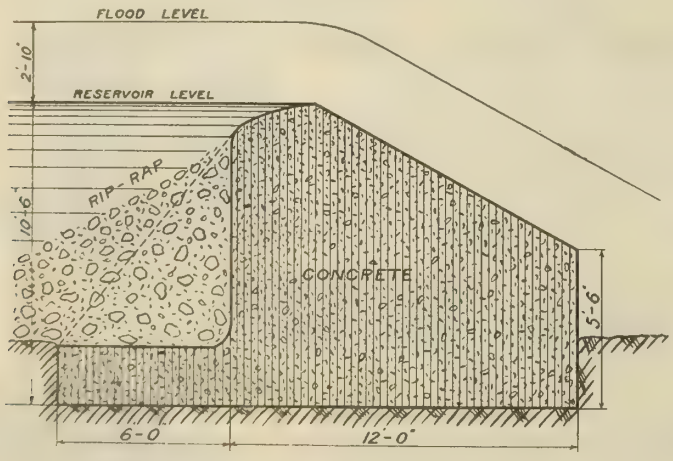
The new dam was built immediately below the old one, the latter serving the work as a coffer dam. The work was carried down to hard rock, all the weathered or deteriorated rock near the surface being removed. The depth necessary to secure a good bed varied from 18 inches to 6 feet.

The concrete used was in the proportion of 1:2½:5, with an addition of 20 per cent. of rubble stones in the interior of the mass. The aggregate used was pit gravel, from ground owned by the company, and sand was obtained by screening.

The height of the dam varies from 12 feet to 8 feet. Fig. 1 shows a section of 10 feet 6 inches in height. The clear length of the spillway is 204 feet.

One abutment of an average thickness of 3 ft. 6 in. was built at the eastern end, up against the wall of the mill, and at the western end an abutment, 10 ft. in width, was provided with a 6 x 9 foot opening, controlled by stop-logs six feet in length, to enable the reservoir to be emptied when desired.

The design of the dam is by Mr. Jno. S. Fielding, C.E., of 15 Toronto Street, Toronto, and contains a special feature in the use of an up-stream floor or toe, extending 6 feet under the reservoir, and loaded with the stone out of the old dam. The connection of this toe to the dam is increased by the addition of ribs, as shown in the up-stream view Fig. 2, the photo of same having been taken before the stone filling was placed in position.



Section of R. Forbes Dam.

During flood time the vertical pressure of the water on this toe is increased as the horizontal pressure on the the up-stream face of the dam is increased, and in this way the safety factor remains satisfactory at all conditions of the flood. Mr. Fielding claims this device to be a distinct advance in the design of dams for low heads, and authorizes this journal to state that the use of the design can be had for the asking, although fully protected in the patent office.

Metal reinforcement was used in a horizontal plane at base of the dam, and also in the vertical and sloping faces, the total cost of such not exceeding $80, but giving an extra strength to the structure to resist temperature stresses, and to enable it to act as a unit. The total cost of the work, including the stone filling and removal of the old dam, was $4,100, and one unique feature being that the engineer's estimate of 777 cubic yards as necessary to complete the work was only exceeded by 1 yard, the actual amount being 778 cubic yards.

The safety factors against sliding with a coefficient of friction of .65 are as follows:

Main portion with water at crest level	2.73
Total section with water at crest level	3.64
Main portion with 2-10 of flood	1.76
Total section with 2-10 of flood	2.465
Total section with 4-6 of flood	2.10

Messrs. Frazer and Eickle, of New Hamburgh, were the contractors.

Mr. G. E. Cooper, has been appointed Assisthant City Engineer of the city of Vancouver.

Mr. H L. Jordan, Canadian Pacific Railway divisional engineer, Montreal, died at St. John, N. B., November 8, aged 35.

J. Galt, C. E., of Toronto, has purchased a property at Vernon, B. C., and will reside for a considerable part of the year there in future.

Building Inspector Capt. G. McSpadden, who has for several years been connected with the building department of the Vancouver city council, and Assistant Commissioner H. T. Devine, have resigned there appointment and will enter the real estate business.

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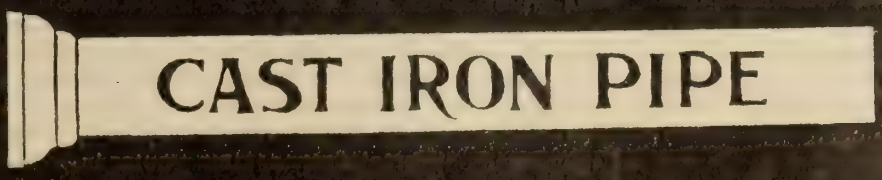

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HEAD OFFICE: - CANADA LIFE BUILDING, MONTREAL

Dominion Government Estimates for Year Ending March 31, 1908

(Continued from last week.)

Ontario.—Reconstruction of portions Alexandria public building destroyed by fire, $3,000; Belleville armoury, $30,000; improvements to Brantford public building, $4,000; Chatham armoury, $19,000; P. O. renewals, repairs, etc., Dominion public buildings,$16,000; additional accommodation, alterations to P.O. fittings, etc., Galt public building, $2,500; Guelph armoury, $50,000; addition to Hamilton drill hall, $100,000; alterations to building, etc., Hamilton post office, $10,000; barracks for R. C. field artillery, Kingston military buildings,$18,000; magazine, London military buildings, $3,000; new stores building, London military buildings, $12,000; additions and improvements, London post office,$7,000; North Bay public building, $25,000; Oshawa public building, $2,000; additional stores building, Ottawa military buildings, $7,000; fittings, etc., Ottawa departmental buildings, $40,000; reconstruction of Nepean stone facing, Ottawa departmental buildings, $5,000; Owen Sound public building, $30,000; Peterboro armoury, $30,000; improvements, etc., to St. Catharines public building, $4,000; St. Mary's public building,$20,000; grading grounds, St. Thomas drill hall, $3,000; Sandwich public building, $1,000; Simcoe public building, $10,000; Stratford armoury,$5,000; alterations and additions to Toronto custom house, $15,000; government share of paving Esplanade in front of custom house property, Toronto custom house, $3,315; improvements, renewals, repairs, etc., Toronto dominion buildings,$5,000; additional accommodation for new corps, Toronto drill hall, $150,000; government share of paving University and Chestnut streets,Toronto drill hall and armouries, $1,900; magazine, Toronto military buildings, $3,000; barracks for permanent corps, to replace property sold to the city, Toronto military buildings, $50,000; works of restoration to make good damage by fire, 29th April, 1906,etc.,Toronto post office, $15,000; land, building, pneumatic plant and machinery, Toronto post office, $20,000; additional postal station "F", Toronto post office, $37,000; government share of pavements, etc., Toronto postal station "C", $500; Wingham public building, $1,000; Woodstock armoury, $7,000.

Manitoba.—Brandon Drill Hall, $30,000; Renewals, improvements, repairs, etc, Dominion public buildings, Man., $10,000; Neepawa public buildings, $12,000; Selkirk public building, $18,000; St. Boniface public building, $12,000; Winnipeg district military stores building, $10,000; improvements, repairs, etc., Winnipeg dominion public buildings, $5,000; Winnipeg new immigration building, including additional land, $40,000; Brick veneering and fitting up hospital quarters in attic, including accessory improvements, Winnipeg old immigration building, $3,500; quarters for non-com officers, including guard room, etc., Winnipeg military building, $6,000; land and building, Winnipeg new post office, $250,000; north of C. P. R. track, Winnipeg postal station, $35,000;

Saskatchewan and Alberta.—Alameda land office, $2,000; Barracks for permanent corps (Strathcona Horse), $40,000; enlargement for post office and examing warehouse purposes, changes, fitting, etc., Calgary public building; $35,000; renewals, improvements, repairs, etc., Dominion public buildings, $7,000; Edmonton immigration building, $7,000; Edmonton public building, $40,000; Medicine Hat public building, $27,000; Regina post office, custom house, etc., $100,000; Saskatoon public building, $25,000.

British Columbia. — Cumberland public building, $12,000; renewals, improvements, repairs, etc., Dominion public buildings, $8,000; Fernie public building, $20,000; Ladysmith public building, $10,000; New Westminster public building for marine and fisheries and Indian affairs agencies, $5,000; Vancouver public building, $100,000; improvements, repairs, supplies, etc., Williams head quarantine station, $10,000.

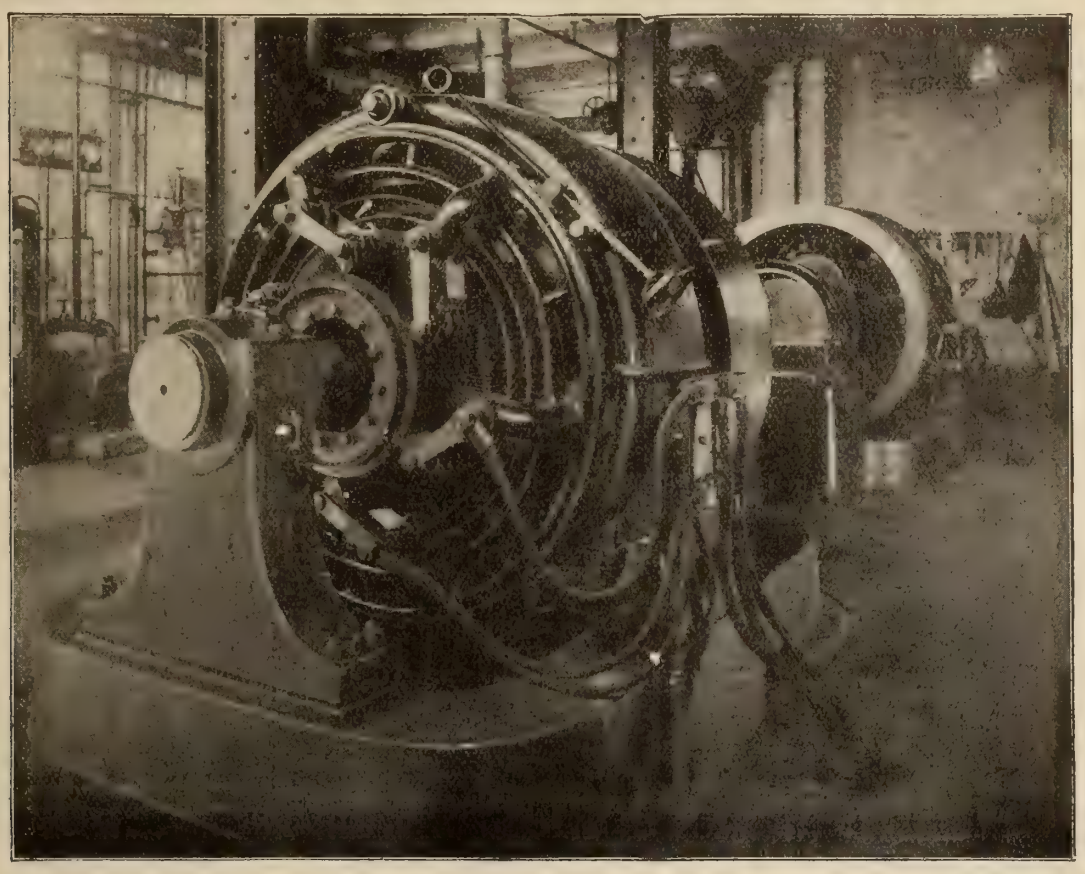
HARBORS AND RIVERS.

Nova Scotia. — Repairs to Queen's wharf, Annapolis, $1,300; wharf, Baddeck, $7,000; Bay St. Lawrence boat harbor, $10,000; dredging entrance channel, Big Lorraine Harbor, $3,600; breakwater, Charlo's Cove, $14,200; extension of groyne and repairs to wharf, Church Point, $2,000; repairs to breakwater, Cow Bay, $10,000; breakwater, Culloden, $6,500; harbor improvements including repairs to pier, Digby, $2,000; wharf, Eskasoni, $1,000.38; wharf enlargement, Frude's point, $2,500; assistance towards harbor improvements, Glace Bay, $6,910; repairs to and part reconstruction of channel protection works, Grand Etang, $2,800; breakwater, Half Island Cove, $7,500; repairs to eastern wharf and main breakwater, Hall's Harbor, $8,300; harbor improvements, Inverness (Broad Cove) Mines, $10,000; wharf, Jersey Cove (or Eel Cove), $5,200; repairs to breakwater, L'Ardoise, $1,000; extension breakwater, Litchfield, $2,100; repairs to harbor works, Mabou, $2,000; wharf, Marble Mountain, $3,100; wharf, Middle County Harbor, $3,000; breakwater, Moose Harbor, $1,200; ballast wharf in Kelley's Cove, New Campbellton, $7,700; improvements, Parker's Cove, $8,000; harbor improvements, Parrsboro, $14,000; improvements Petite Riviere, $3,000; breakwater, Phinney's Cove, $6,800; landing pier, Poirierville, $8,500; boat channel to Three Fathom Harbor, Porters Lake $4,000; Restoration of shore end, Port George Breakwater, $3,150; wharf, Port Hastings, $4,000; closing northern entrance with brush and stone work, Port Hood Harbor, $15,000; to complete, Round Hill wharf, $1,000; Breakwater, Scotch Cove (White Point), $10,000; wharf, Tatamagouche, $3,000; wharf, West Head (Cape Sable Island) $5,000; improvements, Yarmouth Harbor, $10,000; repairs and improvements, harbors, rivers and bridges, generally, 30,000.

Prince Edward Island—Part reconstruction of and repairs to pier, Higgins' Shore pier, $1,500; extension of northern breakwater inwardly and repairs, Miminegash Harbor, $2,000; repairs to breakwater, etc., New London, $1,000; wharf, Point Prim Island, $5,000; repairs and improvements, harbors, rivers and bridges, generally, P. E. I., $8,000; breakwater on Robinson's Island, south side of entrance to harbor, Rustico harbor, $2,500; repairs to breakwater on north side of entrance, dredging, etc., Rustico harbor, $1,500; breakwater on east side of entrance to harbor, St. Peter's Bay, $7,000; breakwater, Summerside harbor, $75,000; general repairs to breakwaters, etc., Tignish, $1,000; improvements and repairs to harbor works, Wood Islands, $3,750.

New Brunswick—Channel through beach, Buctouche, $3,500; wharf extension, repairs, etc., Campbellton, $15,000; improvements and repairs, Cape Tormentine, $5,000; approach, ice breakers, etc., Caraquet Wharf, $2,000; improvement of outlet of river, Chockfish,$1,500; improvements and repairs, Clifton (Stonehaven) breakwater, $2,000; harbor improvements, Dalhousie, $7,000; extension of eastern or outer breakwater, Mispeck, $6,000; wharf, Grand Manan, North Head Breakwater, $10,000; wharf, Oak Point, $8,000; breakwater, including connection with shore, Petit Rocher, $6,500; repairs to breakwater, Pointe du Chene, $5,000; extension of east pier, Quaco Harbor, $10,000; extension of north

Electric Light Plants



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pier, etc., Richibucto $8,500; including tributaries, River St. John, $6,000; contribution to local government not to exceed one-half the first cost of wharfs built by it, River St. John, wharfs in tidal water, $5,000; dredging, St. Andrews, $6,000; improvements, repairs and dredging, St. John Harbor, $200,000; improvements at Shippegan Gully, Shippegan Harbor, $6,000; wharf, at terminus of Caraquet Railway, Shippegan Harbor, $5,000; repairs and improvements, harbors, rivers and bridges, generally, $17,000.

Quebec—Landing pier, Anse a l'Ilot, $2,500; breakwater, Anse du Cap (Cape Cove), $7,750; improvements to wharf at Cap aux Corbeau, Baie St. Paul, $1,800; training piers, etc., Barachois de Malbaie, $8,700; wharf at Pointe a Cote, Bic Harbour, $10,000; wharf on south shore of Lake St. Louis between Woodland and Bellevue, Chateauguay, $1,000; improvements and repairs, Chicoutimi pier, $5,000; extension, Cross Point wharf, $10,000; wharf on river Saguenay, Descente des Femmes, $1,000; pile wharf, Doucet's Landing, $5,000; extension, Escoumains pier, $20,000; wharf repairs and breakwater, Father Point, $24,000; wharf, Grande Riviere de Beaupre, $3,500; breakwater, Grands Mechins, $30,000; wharf extension, Grosse Isle, Quarantine Station, $24,000; repairs and improvements, harbors, rivers and bridges generally, $32,000; slip on west side, Isle Verte wharf, $1,500; repairs, etc., Lake St. John Wharfs, $3,500; dredging, Lake St. John, $4,000; wharfs, Lake St. Francis (Beauce) $7,000; wharf, Lavaltrie, $5,000; repairs to wharf and shed, Les Eboulements, $1,100; removal of rocks, L'Ile d'Alma, $1,000; renewals and repairs, Longueuile wharf, $4,000; improvements of approaches, Lotbiniere and Portneuf Counties Government Wharfs, $1,200; piers, Magdalen Islands, $1,600; wharf, Marsouin, $3,500; landing pier, Mille Vaches, $4,000; wharf on the 'Bassin,' Montmagny, $9,000; renewals and repairs, Murray Bay Wharf, $5,000; to complete, Notre Dame du Portage wharf, $2,400; Perce Wharf (North Cove) $9,000; removal of boulders, Petites Bergeronnes, $,1-500; Pointe aux Trembles Wharf (County Portneuf) $15,000; wharf improvements, Rimouski, $25,000; training dykes, etc., Rivers Ashouapmouchouan Peribonka, $5,000; Riviere aux Renards Breakwater Pier, $8,000; extension and repairs, Riviere aux la Pipe Wharf, $4,000; dredging channel at mouth, Riviere Batiscan, $8,000; harbor improvements, Riviere du Loup (Fraserville) $15,000; dredging and other improvements at mouth, Riviere du Loup (en haut), $15,000; dredging, Riviere Maskinonge, $15,000; repairs, etc., Riviere Ouelle Pier, $4,500; dredging and other improvements, Riviere Saguenay, $60,000; improvements, Riviere St. Louis, $7,000; channel between Grandes Piles and La Tuque, Riviere St. Maurice, $16,500; dam at Grand Piles, Riviere St. Maurice, $40,000; dredging channels at mouth, Riviere St. Maurice, $20,000; harbor of refuge at mouth of Grand Riviere Ste. Anne, Ste. Anne des Monts, $5,500; wharfs, St. Charles Borromee, $2,000; wharf and protection wall, St. Charles de Limoilou, $3,000; approach to isolated block, island of Orleans, St. Francois, $14,500; wharf, St. Fulgence, $1,500; repairs, St. Irenee wharf, $1,200; St. Jean des Chaillons wharf, including dredging. $9,500; wharf extension, St. Jean, island of Orleans, $13,500; repairs to wharf, St. Laurent, $8,500; wharf extension, St. Simeon, $1,200; wharf, St. Sulpice, $7,000; wharf, St. Valier, $4,000; Sorel deep water wharf, $50,000; additional deep water wharfs, Three Rivers Harbor, $100,000; repairs, Trois Pistoles wharf, $2,500; dredging, Yamaska River, $15,000.

Ontario. — Dredging entrance, etc., and close piling, etc., Belle River, $1,450; harbor improvements, Beaverton, $1,500; improvements, Blanche River, $8,000; dredging, Bonte, $4,000; wharf, Colborne Harbor, $8,000; harbor improvements, Collingwood, $22,000; improvements, Goderich Harbor, $50,000; repairs and improvements, generally, harbors, rivers and bridges, $25,000; harbor improvements, Hamilton, $41,000; repairs to piers and dredging, Kincardine Harbor, $4,500; improvement of northern channel in Georgian Bay, Little Current, $50,000; improvements, Meaford harbor, $21,000; dredging, Midland harbor, $40,000; wharf at foot of Rideau Canal, Ottawa, $5,000; dredging and pile protection work, Owen Sound Harbor, $20,000; dredging, Point Edward, $29,000; improvement of harbor, Port Burwell, $60,000; repairs to piers and dredging, Port Hope, $8,000; harbor improvement, Port Stanley, $75,000; dredging, River Otonabee, $10,000; wharfs at mouth, River Thames, $1,800; improvements, Rondeau harbor, $60,000; improvements at mouth, Saugeen river, $7,600; dredging approaches, Sault Ste. Marie wharf, $50,000; improvements and repairs, Toronto Harbor, $100,000; improvements, Winnipeg river, $10,000.

Manitoba.—Harbor of refuge, Big Sandy Point (Lake Manitoba), $1,500; improvement of entrance channel, Grand Marais harbor (Lake Winnipeg), $1,500; repairs and improvements, harbors, rivers and bridges, generally, $6,000; lowering of lake by removing obstructions from bed of Mossy river, Lake Dauphin, $7,000; improvements at mouth of river, Red river, $10,000; extension of wharf, Selkirk, $1,500; dredging channel at mouth of Mossy river, Winnipegosis (Lake), $5,000.

Saskatchewan and Alberta.—Repairs and improvements, harbors, rivers and bridges, generally, $5,000.

British Columbia.—Clearing outlets, Anderson and Kennedy lakes, $1,000; improvements, Columbia river, $30,000; removal of obstructions, Coquitlam river, $1,000; improvements of ship channel and protection works, Fraser river, $30,000; repairs and improvements, harbors, rivers and bridges, generally, $5,000; improvement of North Channel, etc., Nanaimo harbor, $2,500; improvements, North Thompson river, $1,000; improvements, Skeena river, $10,000; removal of sand and gravel bars, Thompson river, $5,000; dredging and removal of rocks, etc., Victoria harbor, $30,000; improvements, Williams Head quarantine station, $10,000.

NEW COMPANIES.

Dominion Carbonic Company, Limited, Toronto, Ont., incorporated, capital $40,000. Directors, R. J. Quail, H. W. Allen, and A. J. MacLellan.

Maple Leaf Flour & Mills Company, Limited, have been granted a license to do business in the province of Ontario. P. E. MacKenzie, Kenora, Ont., attorney.

Calumet Cobalt Mines Company, Limited, Haileybury, Ont., incorporated, capital $500,000. Directors, J. F. Gillies, J. Mackay, and J. F. H. McCarthy.

Norfolk County Telephone Company, Limited, Waterford, Ont., incorporated, capital $40,000. Directors, E. S. Barber, H. Bartholomew, J. H. McIllroth, S. L. Squire, P. G. Pearce, C. H. Glover, and F. L. Culver.

Esperanza Cobalt Mines Company, Limited, Windsor, Ont., incorporated, capital $1,000,000. Directors, W. E. Parker, F. S. Osborne, H. B. Bennett, A. M. Holden, and B. S. Warren.

Elliott-Fisher, Limited, Toronto, Ont., incorporated to manufacture billing machines and book writers, capital $40,000. Directors, E. R. Lynch, Alice Scott and Edith McLellan.

Cobalt Silver Ores, Limited, Toronto, Ont., incorporated, capital $1,000,000. Directors, J. R. L. Starr, J. H. Spence, Lillian Heal, Ada M. Duncan, and Ada A. Rogers.

Ross Cobalt Silver Mines Company, Limited, Cobalt, Ont., incorporated, capital $1,500,000. Directors, D. Ford, W. T. Ross, and P. O'Reilly.

G. W. Murray Company, Limited, Winnipeg, Man., incorporated, to carry on a general lumber business, capital $200,000. Incorporators,

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ACCIDENT INSURANCE
Page
Ontario Accident Insurance Co. 19

BLUE PRINTS
Electric Blue Print Co. 7

BLOWERS
Buffalo Forge Co. 4

BRIDGES (CONCRETE)
Steel Concrete Co. 15

BRIDGES (STEEL)
Canadian Bridge Co. 19
Canada Foundry Co. 23
Dominion Bridge Co. 15
Jenks & Dresser 16
Phoenix Bridge and Iron Works 15

CEMENT
Alsen Portland Cement Co. 9
Bremner, Alex 15
Currie & Co., W. & F. P. 20
DeSola, C. I 7
Gray & Bruce Portland Cement Co. 21
Hyde & Co., F 22
Hanover Portland Cement Co 19
Lakefield Portland Cement Co. 14
McNally & Co., W. 7
Morrison & Co., T. A. 20
National Portland Cement Co 18
Owen Sound Portland Cement Co. 13
Ontario Portland Cement Co. 16
Raven Lake Portland Cement Co. 20
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Toronto Pottery Co 22
Thorn Cement Co. 14

CONTRACTORS' SURETY BONDS
United States Fidelity & Guaranty Co. 21

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Dartnell, E. F. 6
Hopkins & Co., F. H 24
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Mussen & Co., W. H. C. 3
Morrison & Co., T. A. 20
Toronto Pressed Steel Co. 7
Vining Bros. Mfg. Co. 5

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Allis-Chalmers-Bullock 11
Beatty & Sons, M. 22
Canada Foundry Co. 23
Hopkins & Co., F. H. 24
Locomotive & Machine Co. 15
Mussen & Co., W. H. C. 3
Peat & Sons, James 14
Toronto Pressed Steel Co. 7

CONCRETE CONSTRUCTION
Ambursen Hydraulic Construction Co. 7
Loignon, A. & E. 7
Steel Concrete Co. 15

CONTRACTORS' EMPLOYMENT BUREAUS
Bryans & Co., E. E. 7
Zarossi, Banco 15

CORRUGATED IRON
Metallic Roofing Co. 5
Pedlar People 22

CRUSHERS (STONE AND ROCK)
Allis-Chalmers-Bullock 11
Beatty & Sons, M. 22
Canada Foundry Co. 23
Dartnell, E. F. 6
Hopkins & Co., F. H. 24
Mussen & Co., W. H. C. 3
Morrison & Co. T. A. 20

DRILLING CONTRACTORS
Page
Harvey, J. 20
Peat & Sons, James 14

DEBENTURES
Nay, Anderson & Co. 22
Stimson & Co., G. A. 21

ENGINEERS AND CONTRACTORS
British Columbia General Contract Co. 23
Canadian White Co. 6

ENGINEERS (CIVIL)
Archibald, George H. 15
Chipman, Willis 17
Connor, Clarke & Monds 17
Davidson, Shirley 21
Davis, Johnston 15
Fenson, C. J. 16
Fielding, John S. 6, 13
Galt, John 7
Jackson, John H. 17
Lea & Coffin 17
Leofred, A. 6
McConnell, Brian D. 13
McDougall & McRae 7
Parke, Roderick J. 17
Scott, Wm. Fry 21
Simpson, T. T. 21

ENGINEERS (MECHANICAL)
Farmer, John T 21
Galt, John 7

ENGINES
Allis-Chalmers-Bullock 11
Cameron & Co, Hugh 16
Sawyer & Massey Co 16

ELECTRICAL APPARATUS AND SUPPLIES
Allis-Chalmers-Bullock 11
Canadian Gen. Elec. Co. 23
Drummond, McCall & Co 14
Northern Electric & Mfg. Co.

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Cameron & Co., Hugh 16
Meadows, George B., Toronto Wire, Iron & Brass Works Co. 9
McGregor & McIntyre 6
Seagrave, W. E., Walkerville, Ont. 16

HOISTING MACHINERY
Allis-Chalmers-Bullock 11
Beatty & Sons, M. 22
Canada Foundry Co. 23
Hood & Sons, Wm 19
Hopkins & Co., F. H. 24
Mussen & Co., W. H. C. 3

HYDRANTS
Canada Foundry Co. 22
Canadian Fairbanks Co 20
Gartshore-Thompson Pipe & Foundry Co. 9
Kerr Engine Co. 6
Montreal Pipe Foundry Co. 9
McDougall Co., R. 21

LOCOMOTIVES AND RAILS
Canada Foundry Co. 23
Gartshore, John J. 19
Hopkins & Co. 24
Locomotive & Machine Co. 15
Mussen & Co., W. H. C. 3
Sessenwein Bros 7

PLASTER BOARDS
P. W. St. George 20

PILE DRIVING
Hood & Sons, Wm. 19
Russell, John E. 19

PAVING AND PAVING MATERIALS
Brunet, Joseph 17
Forest City Paving Co. 17
Ontario Asphalt Block Co. 17
Silica Barytic Stone Co. of Ontario 15
Warren Bituminous Paving Co. 7

PIPE (CAST IRON)
Page
Canada Foundry Co. 23
Gartshore-Thomson Pipe and Foundry Co. 9
Gaudry & Co., L. H. 7
Montreal Pipe Foundry Co. 9

PIPE (WOODEN)
Canadian Pipe Co. 9
Pacific Coast Pipe Co. 20

PUMPS AND PUMPING MACHINERY
Allis-Chalmers-Bullock 11
Canadian Buffalo Forge Co. 4
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Canada Foundry Co. 23
Drummond, McCall & Co 14
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ROAD MACHINERY
Cameron & Co., Hugh 16
Climax Road Machine Co. 7
Heaman, George 23
Morrison & Co., T. A. 13
Sawyer & Massey Co 16

ROCK DRILLS
Allis-Chalmers-Bullock 11

ROPE
Allan, Whyte & Co. 21
Dominion Wire Rope Co. 24
Greening Wire Co., B. 21

STEEL BARS (CORRUGATED)
Corrugated Steel Bar Co. of Canada 16

STRUCTURAL IRON AND STEEL
Canada Foundry Co. 23
Dominion Bridge Co. 15
Jenks & Dresser 16
Locomotive & Machine Co. 15
McGregor & McIntyre 16
Phoenix Bridge & Iron Works 15

STONE
Crushed Stone, Limited 16
Doolittle & Wilcox 21

SHOVELS (STEAM)
Allis-Chalmers-Bullock 11
Beatty & Sons, M. 22
Canada Foundry Co. 23
Hopkins & Co., F. H. 24
Locomotive & Machine Co. 15
Mussen & Co., W. H. C. 3

SEWER PIPE
Bremner, Alex. 15
Canadian Sewer Pipe Co. 17
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G. W Murray, J. D. Mather, G. M. Elliott, R. D. Macdonald, and E. Newell, all of Winnipeg.

McCann-Knox Milling Company, Limited, Toronto, Ont., incorporated, capital $100,000. Directors, W. McCann, J. E. Knox and C. P. Chisholm.

Latchford Silver Mining Company, Limited, Toronto, Ont., incorporated, capital $100,000. Directors, P. J. Montague, R. F. Wilks, and F. Pottage.

Elgie & Jarvis Lumber Company, Limited, Toronto, Ont., incorporated, capital $40,000. Directors, R. B. Elgie, J. B. Jarvis and Mary Elgie.

National Car Company, Limited, Toronto, Ont., incorporated, capital $300,000. Directors, A. Steward, T. H. Kilgore, and Louise Williams.

The Cuyahoga Silver Cobalt Mines Limited, Toronto, incorporated, capital $1,000,000. Directors, H. S. Pritchard, F. Watt, and F. C. Jarvis.

The Thyle Meat Company, Limited, Winnipeg, Man., incorporated, capital $250,000. Incorporators, A. C. Johnson, S. Jonasson, L. Sturgess, all of Winnipeg, and others.

Anima-Silver Mines, Limited, Cobalt, Ont., incorporated, capital $300,000. Directors, W. Black, L. E. Hambly, and J. K. Leslie.

James Burgess & Sons, Limited, Grand Falls, N. B., are seeking incorporation to carry on a general lumber business.

A license has been granted Penmans Limited, to do business in Ontario. O.R. Whitby, Paris, Ont., attorney.

The Canada Lighting Fixtures, Limited, Winnipeg, Man., incorporated, capital $100,000. Incorporators, J. Stuart, R. H. Mainer, R. G. Mainer, R. J. Cole, and E.C. White, all of Winnipeg.

The Western Rubber & Apparatus Company, Limited, Winnipeg, Man., incorporated, capi al $25,000. Incorporators, S. MacK. MacLeod, A. A. Andrews, J. H. Anderson, G.D. Minty, all of Winnipeg, and W. P. Kearney, of Montreal, Que.

A license has been granted the International Marine Signal Company, Limited, to do business in Ontario. T. L. Wilson, Ottawa, Ont., attorney.

A license has been granted the British America Elevator Company, Limited, to do business in Ontario. W. Gow, Toronto, Ont., attorney.

A license has been granted the Monterey Waterworks & Sewer Company, Limited, to do business in Ontario. Z. A. Lash, Toronto, Ont., attorney.

Southern Belle Cobalt Silver Mining Company, Limited, Cobalt, Ont., incorporated, capital $1,000,000. Directors, T. Langton, M.J.O'Neill and J. Martin.

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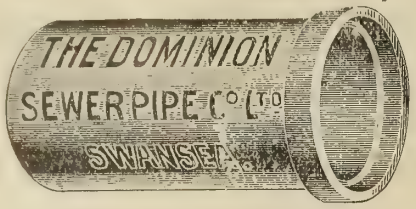

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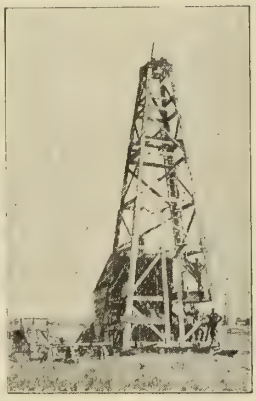

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Catharines, Ont., incorporated, capital $4,000,000. Directors, H. S. Osler, J.F.H. McCarthy and J. M. Ewing.

H.E.Simpson Building Company, Limited, Niagara Falls, Ont., incorporated, capital $50,000. Directors, H. E. Simpson, B. J. Coulson, and J. J. Bampfield.

NOTES.

J. Benoit and P. Benoit, brickmakers, of St. Dominique, Que., have registered their business as Benoit & Fils.

The Sydney Cement Company, Sydney, N. S. have received an order for 700 barrels of cement to be delivered in Mexico.

Collectors' and treasurer' bonds filed with the clerk of a municipality become official records of the office and should not at any time be removed therefrom. We notice that councils in changing officers, or when acception new bonds, sometime without a proper auditors' report, order the clerk by resolution to give up the old bonds. A bondsman is liable for misappropriation of funds during the term of the bond no matter when the same may be discovered. Bondsmen for Ontario municipal officers are not often called on to make good, but when the circumstances are such as to render this necessary the bonds should be available.

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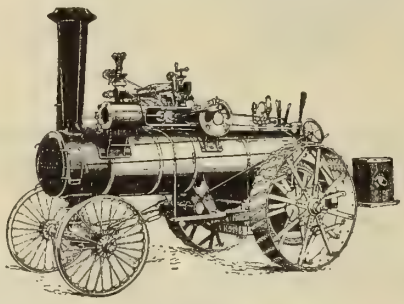
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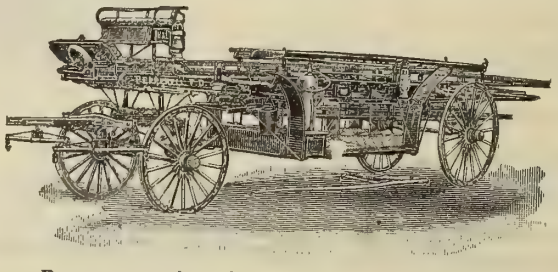
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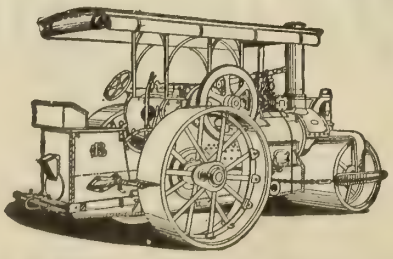
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							Neat.					3 (Sand) to 1 (Cement)				
					Initial	Final	1 dy.	7 dys.	28 dys.	3 mos	1 yr.	1 dy.	7 dys	28 dys.	3 mos.	1 yr.
1903	20	O.K.	3.135	2.1	162	345	307	701	783	827	*	74	214	299	367	*
1904	44	O.K.	3.150	2.0	132	342	300	744	848	914	938	86	262	354	401	427

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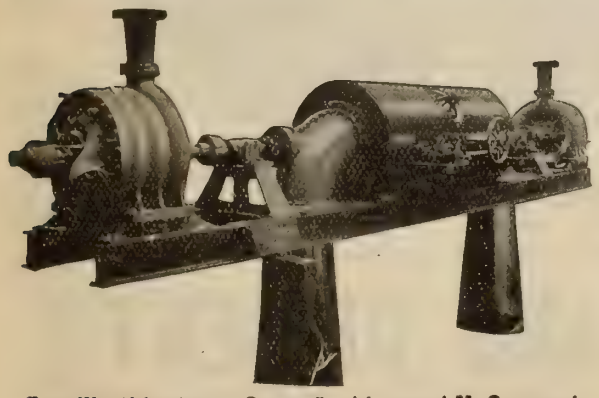

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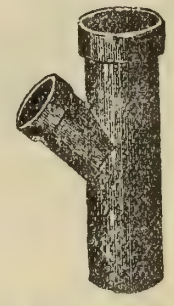

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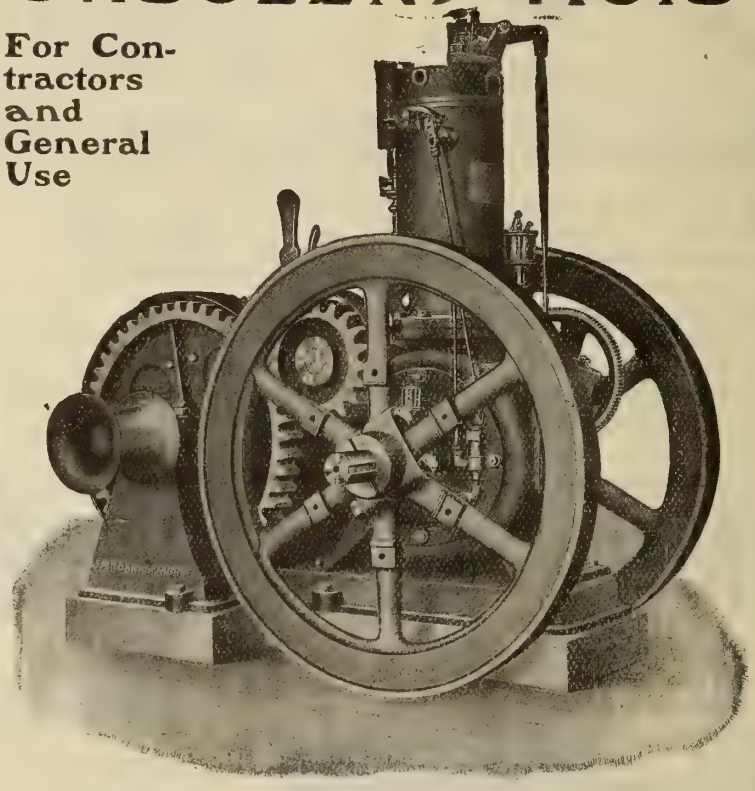

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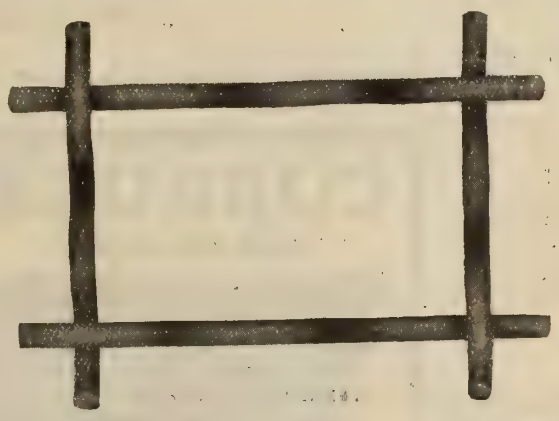

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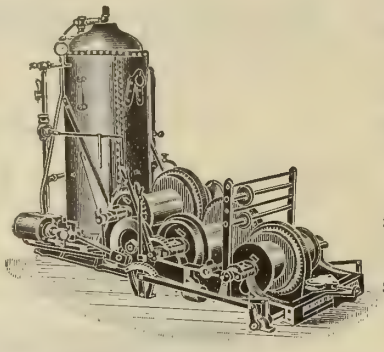

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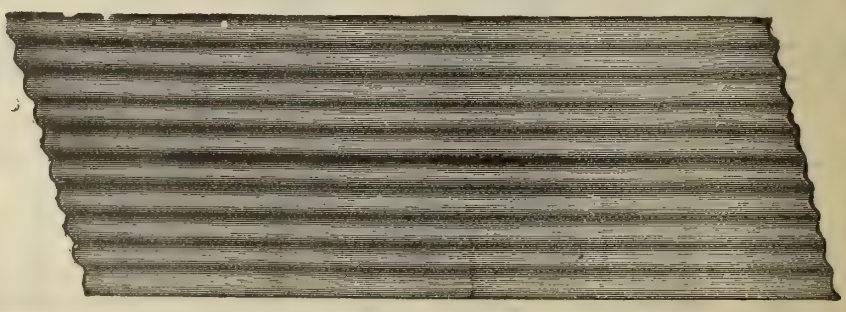

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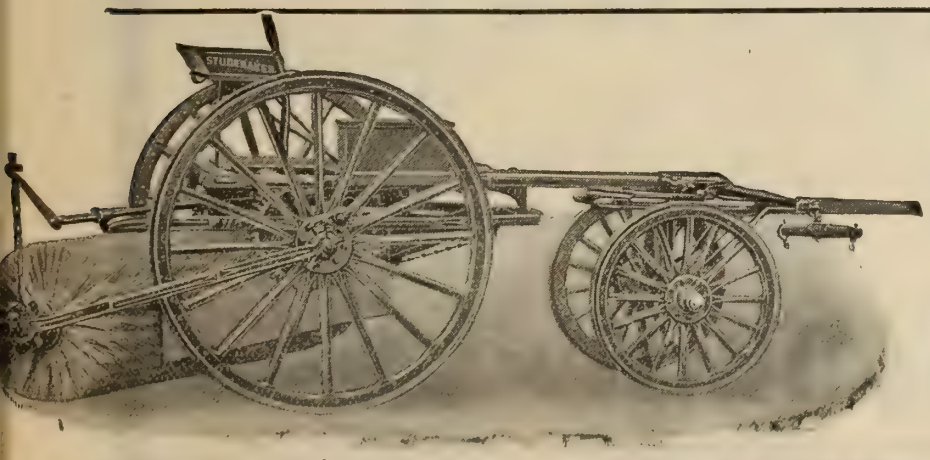

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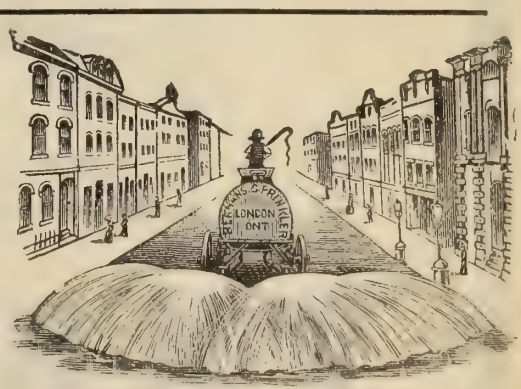

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OTTAWA, ONT.

Architectural Competition for Departmental and Justice Buildings.

Competitive drawings are invited for Departmental and Justice Buildings to be erected for the Dominion Government at Ottawa, Ont.

The author of the best design will be awarded a premium of $8,000, the second best $4,000, the third best $2,000 and the fourth best $1,000.

Drawings will be received not later than April 15th, 1907, and are to be addressed to the Secretary of the Department of Public Works, Ottawa.

This competition is open to Canadian Architects who have been resident in Canada for one year or more.

Conditions of competition stating requirements of buildings and maps showing site &c. may be had on application to the undersigned.

By order,
FRED. GELINAS,
Secretary.

Department of Public Works,
Ottawa, December 12, 1906.

Newspapers will not be paid for this advertisement if they insert it without authority from this Department.

TENDERS FOR SUPPLY OF 30 MILES OF WATER PIPE

Sealed tenders addressed to the Chairman of the Fire, Water and Light Committee for the supply of thirty miles of assorted water pipe and quantity of specials for the City Water Works, will be received at the office of the undersigned up to 2.30 p.m. on

FRIDAY, MARCH 1, 1907.

Specifications and forms of tender may be obtained at the office of H. N. Ruttan, City Engineer, Winnipeg, Man.

Each tender must be accompanied by an accepted cheque or draft payable to the order of the City Treasurer, or cash deposit for the sum called for in the form of tender supplied, which will be subject to forfeiture in case or failure on the part of the contractor to enter into a written contract with approved sureties if called upon to do so.

The city reserves the right to reject any or all tenders or to accept any bid which appears advantageous to the City of Winnipeg.

C. J. BROWN,
City Clerk.

City Clerk's Office, Winnipeg, December 8, 1906.

CONTRACTS OPEN.

OSHAWA, ONT.—Debentures will be issued for $2,400 for the purchase of a park.

CHATHAM, ONT.—Plans are being prepared for a new waterworks station to cost $19,000.

PORTAGE LA PRAIRIE, MAN.—The Bank of Montreal will erect a new building here, next year.

ESTEVAN, SASK.—It is rumored that the Roman Catholics of this town will erect a new hospital.

HAMILTON, ONT.—Trebles, Limited have decided to make large additions to their present premises.

PORT ARTHUR, ONT. — G. F. Clarkeson is completing arrangements for the establishment of a large lime producing plant in this town.

LETHBRIDGE, ALTA. — George Taylor is about to erect a large greenhouse on Second street.

OWEN SOUND, ONT.—The City Council are considering the question of purchasing a fire engine.

LACOMBE, ALTA.—The Presbyterians of this town have decided to build a new church to cost $12,000.

ST. CATHARINES, ONT. — Debentures will be issued for $3,000 with which to purchase a school site.

MAPLE CREEK, SASK.—The Town Council have decided to expend $2,000 for extension of waterworks system.

FORT FRANCIS, ONT.—Russell Bros., of Winnipeg, Man., have decided to establish a foundry and machine shop here.

ST. LOUIS, QUE.—The Town Council have decided to purchase a fire engine with a capacity of 800 gallons per minute.

NEW WESTMINSTER, B. C. — F. J. Lynch has purchased a lot on Clarkson street on which he will erect a cigar factory.

LONDON, ONT.—Bids were opened December 18, for purchase of $130,000 debentures, but owing to low price offered, the sale was deferred.

SASKATOON, SASK.—A site has been secured for the new post office and customs house, and tenders for the erection of the buildings will be called for shortly.

WEYBURN, SASK. — Robinson, Walsh, Greig & Leavens have purchased a site corner Souris avenue and Second street, on which to erect a hotel to cost $40,000.

MEDICINE HAT, ALTA. — J. D McGregor will commence work immediatley in connection with his irrigation scheme. A pump will be installed costing $5,000,000.

SARNIA, ONT.—On January 7, 1907, the ratepayers will vote on the question of spending $25,270, for construction of sewers and water mains, and erection of a storehouse.

ST. ANDREWS, N.B.—G. Murdock, C.E., of St. John, N.B., is preparing a report on the question of installating a sewerage system, and also the construction of a wharf.

BRANDON, MAN.—Morris & Douglas have decided to erect a new theatre to cost $50,000, and have instructed A. & W. Melville, architects, Winnipeg, to prepare plans therefor.

LA TUQUE, QUE.—A company is being formed, in which John Breakey, President of the Quebec Bank, and W. Hanson, of Montreal, are interested, for

the purpose of establishing large pulp and paper mills here.

PEMBROKE, ONT.—Tenders will be received up to January 5th, 1907, by J. P. Sarsfield, chairman of the Waterworks Committee, for the supply of steel pipe, specials and valves.

PORT ARTHUR, ONT.—The Railway & Municipal Board have granted the application of the town for approval of a by-law to extend the waterworks system, at a cost of $50,000.

REGINA, SASK.—The Winnipeg Oil Co., Winnipeg, Man., may erect a large warehouse here.—Mr. Smith, of Smith & Ferguson, will erect a large block of buildings on Rose street next year.

WOODSTOCK, N.B.—It is reported that the Dodge Manufacturing Co., of Indiana, have acquired the business of the Holnton Foundry & Machine Co., and intend to erect several new buildings.

SINTALUTA, MAN.—G. G. Barbe will receive tenders up to December 29 for masonry, plastering, carpentry, galvanized iron, heating, painting and glazing necessary in the erection of a bric school here.

ST. JOHN, NFLD.—A large hotel i to be erected here at a cost of $100,00 among those interested in the proje are: W. A. McKay, North Sydne N. S., R. Taylor, Halifax, N. S. an Z. Garmeau, Quebec, Que.

BRANTFORD, ONT.—The Cit Council have granted a franchise to th Dominion District Steam Heating Com pany, of Toronto, for the establishmen of a plant for distribution of steam an hot water for heating purposes.

STRATFORD, ONT.—The Grand Trunk Railway have taken out a permit for the erection of a new round house, cost $8,000.—The Stratford and St. Joseph's Radial Railway Company are seeking permission from the Dominion Government, to operate an electric road from this city to St. Joseph.

VANCOUVER, B. C.—P. Burns & Co. have purchased property on which they will erect a block of buildings.—The Royal Bank have purchased property on Government street and will erect a new building.—Tenders will be received up to January 21st, 1907, by W. W. Northcott, City Purchasing Agent, for the supply of 4,000 feet of six-inch and 10,000 feet of four-inch cast iron water pipe.

EDMONTON, ALTA.—The ratepayers have passed by-laws authorizing the expenditure of $121,000 for new pavements, $119,000 for street car rails, and $45,000 for an incinerator.—A pipe line will be laid connecting the Strathcona pumping station with the city water mains, estimated cost $6,000.—The City Commissioners have been authorized to purchase a 3,000,000 gal on turbine pump.

OTTAWA, ONT.—F. Gelinas, Secretary, Department of Public Works, will receive tenders up to January 11th, 1907, for construction of a wharf at Baddeck, N. S., and up to same date for construction of a wharf at Middle County N. S., —The Grand Trunk Pacific Railway will shortly take tenders for the construction of the following portions of a new road: Moncton to Chipman; Grand Forks to Quebec bridge; La Tuque forty miles westward, and from Lake Abitibi eastward one hundred and fifty miles.—The Quebec Central Railway will extent their new line to connect with the Temiscouata Railway at Cavana, 150 miles from St. George, through the La Fomine Valley and along the river and frontier line.

MONTREAL, QUE.—It is reported that O. D. Slavey, an American hotel manager, in conjunction with Montreal and American capitalists, is planning the erection of a twelve-story hotel on the southwest corner of Dominion Square. He states that the plans have already been prepared for the structure, which will cost $125,000.—The Bank of Toronto have decided to defer the erection of their new building, to be erected corner of St. James and McGill streets, till the spring of 1908.—A. Bruce Smith, Manager of Telegraphs, Grand Trunk Pacific Railway, will receive tenders up to December 31st, for delivery of 8,000 cedar telegraph poles 25 feet long, and 2,000 30-feet long.—A. Ferland has purchased a lot on St. Andre street, and A. Pickard has purchased vacant property on Demontigny street.—The Mount Royal addition will [illegible] to Cooke's Church, corner Mutual street and Queen street east.—A by-law providing for the issuance of $125,000 car-route debentures will be submitted to the ratepayers, January, 1907.

WINNIPEG, MAN.—R. Filer, of Montreal, Que., contemplates the erection of a large apartment house, corner Langside and Cornish avenues.—A Roman Catholic church is to be erected at Fort Rouge and another in the western part of the city.—Tenders will shortly be called for the supply of a 1000 h. p. generator and a 500 h. p. boiler for the city.—Joseph Bernhardt has purchased the store and site owned by John Leslie and will erect a hotel.—It is reported that the Y. M. C. A. will make additions to their premises.—Tenders will shortly be taken by the Provincial Government for poles, wire, crossarms, etc. necessary for the construction of telephone lines throughout the Province of Manitoba.—A. & W. Melville, architects, are preparing plans for a new theatre to be erected at Brandon.—The Fire, Water & Light Committee have recommended that the well known as No. 1 be deepened to the same level as No. 2 and the old pump of well No. 1 be sunk to the new level. The cost of the changes will be about $12,000.—C. B. Smith, C. E., states that tenders will shortly be called for the work necessary in connection with the proposed power development at Point du Bois Falls.—The Imperial Syrup Company will erect a factory for the manufacture of macaroni.—The Grand Trunk Pacific Railway have purchased a large block of land, about four miles west of this city, which they will use as yards, and will also erect workshops.

FIRES.

Forge building of the Nova Scotia Steel & Coal Company, New Glasgow, N. S., damage $5,000.—Richardson's dry-goods store, Reach & Company's grocery store, and adjoining buildings, Calgary, Alta., loss $50,000.—J. L. Thornley's shoe store, Fernie B. C., loss $2,000.—Residence of W. J. Schwigler, Port Arthur, Ont., loss $6,000.—Mill of T. Lefebore & Company, Montreal, Que., loss $25,000.—Charmandy Block, North Bay, Ont., loss $6,500.—Lalonde & Milloy's planing mill, Winnipeg, Man., loss $6,000.

CONTRACTS AWARDED.

PETERBORO, ONT.—Erection of military buildings for Dominion Government: Robt. Clinkscale, this town, contractor.

HALIFAX, N. S.—Erection of round and engine houses for Intercolonial Railway: M. E. Keefe Company, Halifax, contractors.

VANCOUVER, B. C.—Erection of a bridge on Third street: Askeu & Kennedy, Vancouver, successful tenderers at $749.

SEAFORTH, ONT.—Purchase of town debenturers: Wood, Gundy & Company, Toronto, successful tenderers at $55,111.

LONDON, ONT.—Supply of 1,200,000 feet of lumber for McClary Manufacturing Company's storage building: G. H. Belton, London, Ont., successful tenderer.

SYDNEY MINES, N. S.—Erection of station, freight house and other buildings for Intercolonial Railway: Chappell Bros. & Company, Sydney, N. S., successful tenders.

WOODSTOCK, ONT.—Installation of a heating system in Collegiate Institute: McEachren Heating & Ventilating Company, Galt, Ont., successful tenderers at $2,900.

WINNIPEG, MAN.—Erection of steel tower and water tank for Lake of the Woods Milling Company: Ontario Wind Engine & Pump Company, Winnipeg, successful tenderers.

TORONTO, ONT.—Erection of grand stand at Exhibition Park, F. Holmes, Toronto, successful tenderer at $216,465.—Erection of Horticultural Building at Exbition Park: E. R. French, Toronto, successful tenderer at $90,000.

AMHERSTBURG, ONT.—$12,244.45 4½ per cent sewer debentures have been awarded to W. C. Brent, Toronto, at 97.09 and accrued interest. Other bids received were: Wood, Gundy & Co., Toronto, 97.75; Aemilius Jarvis & Co., Toronto, 96,576.

AN OPPORTUNITY FOR CEMENT USERS

The third anuual convention of the Natural Association of Cement Users will be held at Tattersall's, Chicago, January 7th to 12th, and as usual the Ideal Concrete Machinery Company, of South Bend, Ind, will prepare an exhibit, to which, through this publication, they extend an invitation, to not only their many customers, but those who will also attend the Convention because of their interest in the great possibilities embodied in the use of concrete in its various forms.

This Company is never at a standstill, and from year to year add parts, accessories or attachments to their famous "Ideal" block machine, which gives their customers an opportunity to add to their equipment.

During the past year they have perfected a complete brick machine, which can also be used as an attach-

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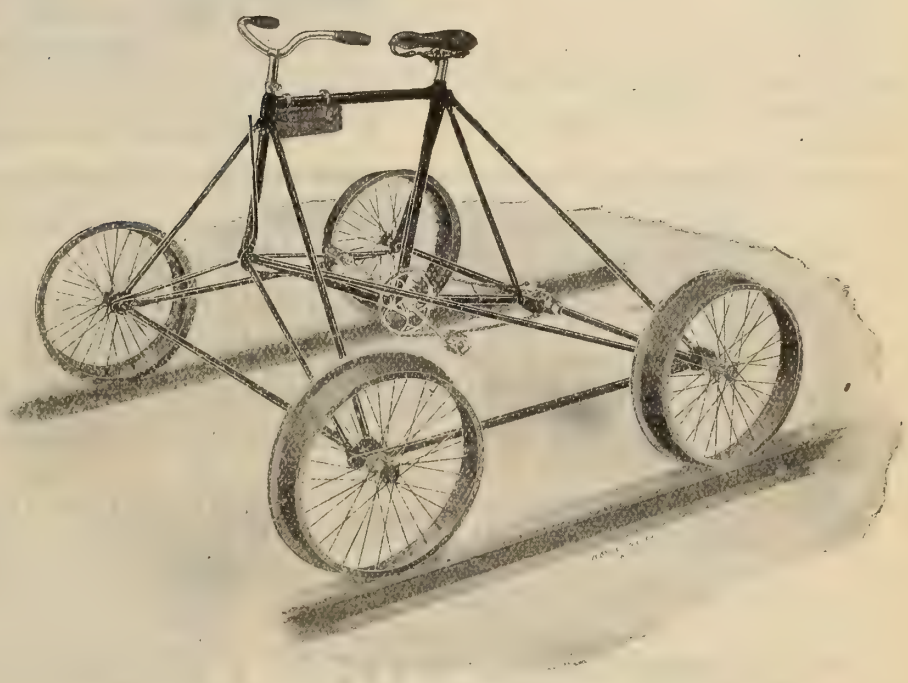

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Their stellar attraction, however, around which centers the great interest of this splendid array of new features, will be the Ideal concrete mixer, which they at last have brought to that perfection detail which entitles it to be classed an "Ideal."

Our readers are cordially invited to inspect this exhibit, and we can assure them that at the headquarters of the the Ideal Company, they will find a corps of attendants who will be pleased to explain as well as demonstrate by actual operation everything shown.

NEW COMPANIES.

St. Paul Cobalt Mining Company, Limited, Cobalt, Ont., incorporated, capital $600,000. Directors, A. G. Terrill, S. F. Nelson, and H. Gibson.

Anthony Blum Gold Mines, Limited, Toronto, Ont., incorporated, capital $100,000. Directors, J. G. Shaw, J. Montgomery, and J. G. Strong.

Coleman & Quebec Mining Company, Limited, Ottawa, Ont., incorporated, capital $1,000,000. Directors, V. O'Connor, R. Mason, J. Wilson, A. T. Shillington, and J. Carss.

Algoma Custom, Smelting & Refining Company, Limited, Sault St. Marie, Ont., incorporated, capital $250,000. Directors, T. H. Pollock, J. Hermann, W. H. Green, H. Appleton, and A. Dunsmore.

Stellar Silver Cobalt Corporation, Limited, Sudbury, Ont., incorporated, capital $1,000,000. Directors, J. F. Black, J. H. Morin, and C. McCrea.

Delaney & Pettit Sand Paper Company, Limited, Toronto, Ont., incorporated, capital $50,000. Directors, C. Delaney, C. S. Pettit and G. H. Pettit.

The Vulcan Company, Limited, London, Ont., incorporated, to manufacture furnaces, stoves, etc., capital $100,000. Directors, R. W. Shaw, E. W. M. Flock, and F. G. Mitchell.

Old Chap Mining Company, Limited, Cobalt, Ont., incorporated, capital $1,000,000. Directors, W. H. Franciss, R. G. Coan, and Fay W. Libby.

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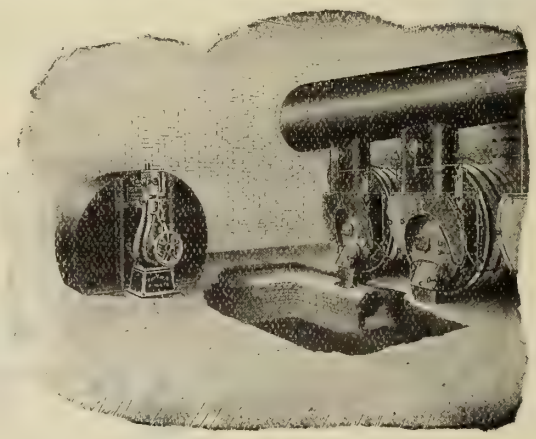

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Independent of Weather

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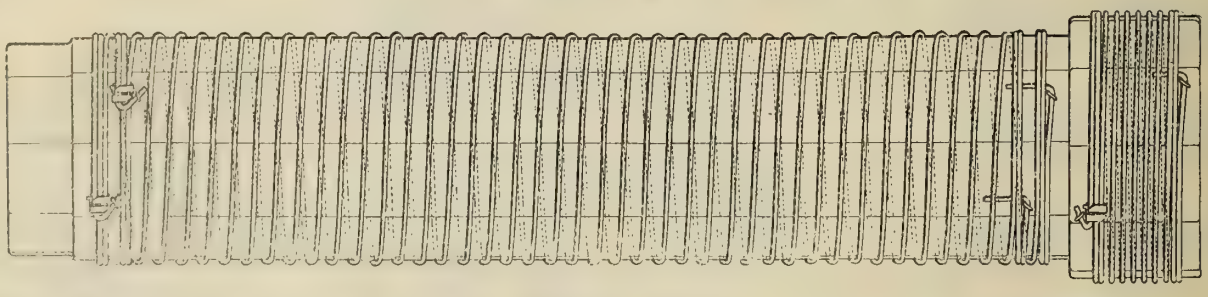

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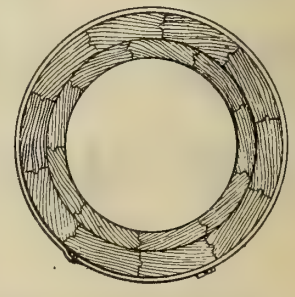

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ing Company, Limited, Arnprior, Ont., incorporated, capital $40,000. Directors, Wellington M. Howe, W. A. Cameron, R. Richardi, S. R Rudd, M. Havey, J. J. Neilson and J. G. Ledgerwood.

Cobalt Silver Prince, Limited, Cobalt, Ont., incorporated, capital $1,000,000. Directors, S. D. Maddin, D. Crawford, H. Campbell, H. H. Lang, and F. Finn.

Cobalt Chief Silver Mining, Limited, Toronto, Ont., incorporated, capital $600,000. Directors, J. W. McDonald, G. J. Valin, T. Brown, Eva L. Bradley and Gertrude Cherpaw.

Flanagan & Cameron, contractors, have commenced business at Fort William, Ont.

A new contracting firm at D'Israeli, Que., has been registered. The members are H. Beaudoin and F. Soucy.

Canadian Portland Cement Company, Toronto, have declared a 3½ per cent. dividend for half year, payable January 2, 1907.

Rhodes, Curry & Co., of Amherst, N. S., have received an order for several narrow gauge, twenty ton flat cars for the Anglo-Newfoundland Developing Co., of Grand Falls, Nfld.

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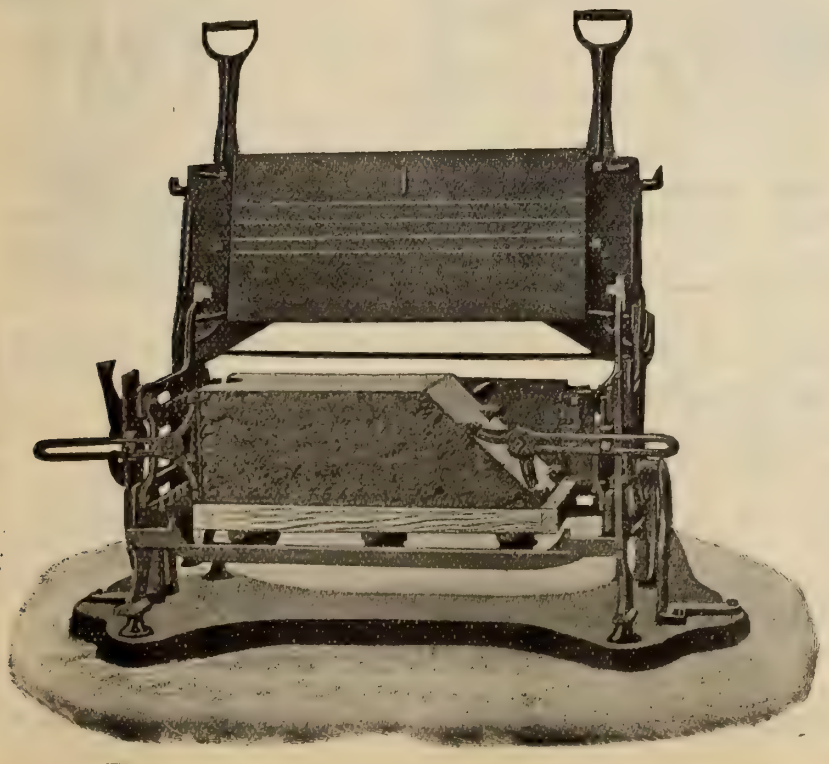

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CALENDAR ANNOUNCEMENT.

Messrs. F. H. Hopkins & Company, railway and contractors' supplies, Montreal, have issued their 1907 calendar, which is a first-class one for office purposes, being printed on green paper and the figures being large and distinct. It illustrates some of the different lines handled by this firm, who will be pleased to mail one, free of charge, to any of our readers upon request.

ERRATUM.

In the description of the R. Forbes dam at Hespeler, Ont., which appeared in the last issue of the CONTRACT RECORD, it was stated that the old dam was "a modern structure." The word "modern" should have been "wooden."

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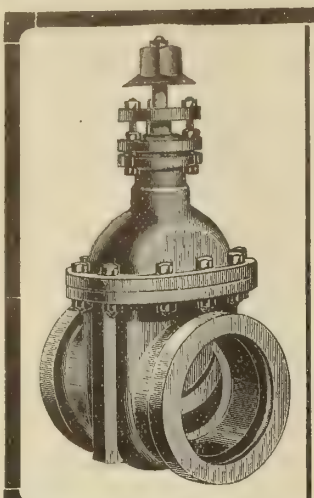
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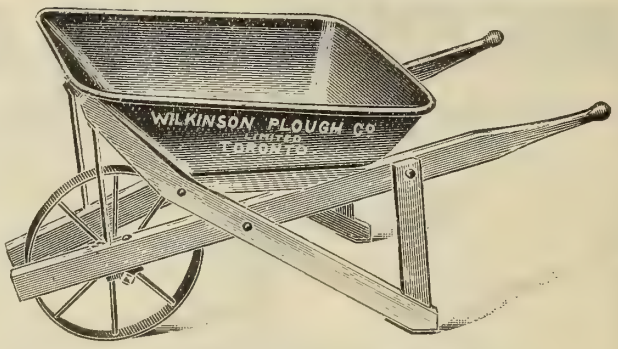

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J. G. WHITE & COMPANY, LIMITED, London, England
WARING-WHITE BUILDING CO. London, England

I. A. Chadburn and G. W. Bought have registered at Montreal, as the Standard Cement Brick & Block Company.

Messrs. M. A. Stewart and G. G. Powell, assistant roadway engineers, City Engineer's Department, Toronto, will assume the duties now devolving upon Mr. W. M. McPhail, who leaves the city's service on December 31 to assume the management of the Western Bitulithic Paving Company, with headquarters in Winnipeg.

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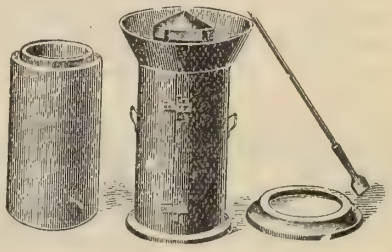

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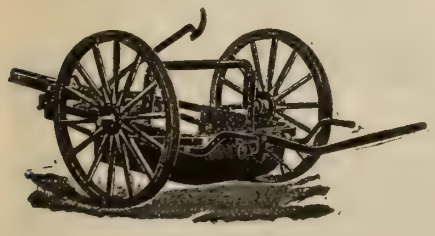

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THE HUMAN SIDE OF THE ENGINEERING PROFESSION*

(AN OUTLINE)

By V. Karapetoff, Cornell University.

FUNDAMENTAL THOUGHT: Professional usefulness and personal satisfaction depend on the right conception of life and on the degree in which this conception of life is manifested in daily activity.

PART I.—WORK AND CONDUCT.

There are three essential requisties for an efficient and successful engineer:

A. Sound professional knowledge;

B. Knowledge of business forms and of human relations;

C. Good and strong character.

A. Professional Knowledge. A man who knows only "how" to do certain things, but does not know "why" they are done so, usually remains in subordinate positions. Get into the habit of analyzing; also, have your knowledge systematized.

In order not to get "rusty" you ought to do some study, or at least some reading outside of your daily routine work. This outside work may be classified, in an ascending scale of difficulty, as follows:

1. Keep notes on your regular work, with sketches, samples of calculations, etc. On separate notes keep matters of doubt to straighten them out at a future opportunity.

2. Read regularly at least one periodical relating to your specialty, and keep some kind of a general index on at least one subject in which you are particularly interested.

3. Be sure about the fundamental laws, facts, and assumptions on which your branch of engineering is based. If you are but recently from college, you can go over your old books and notes; otherwise read a good modern text book.

4. Gradually get familiar with more advanced books treating of the various branches of your profession; go from time to time to the public library and see if there is anything new in your specialty.

5. Select some one branch of engineering, if possible somewhat different from that in which you are regularly engaged, and devote some time to it. Know more than the next fellow does; it will pay you.

6. Do not miss any chance to make an original investigation; this will develop your thinking, increase your self-confidence and raise your standing in the profession.

7. Inventing is the highest form of the engineering activity; there is no reason why you should not bring some improvement into the work in which your are engaged. Concentrate your mind on one thing, work patiently and persistently, and you will be sure to achieve something that will be new and useful.

B. Knowledge of Business Forms and of Men. You naturally expect some day to occupy a responsible position in your profession. This is impossible without a sound knowledge of established business forms and of human relations in general. Here again there are several stages of study and observation. Take up as many of them as your ambition, time, and ability will allow.

1. Observe the characters of men you are working with; in particular, the influence of their previous experience and education, of their age and temperament, of their views on general life questions, etc.

2. Observe things that make them efficient and happy, or that are impediments in their work; things that they would like to have and the main things that they object to.

3. Observe critically your superiors and their ways of acting towards their chiefs and subordinates. Do this without malice, but rather with a sincere desire to find out the best way of conducting the work, when you shall be called to perform their duties. Make for yourself a clear mental picture of an ideal man in a certain position, and try to follow this ideal in your own business life.

4. Observe and read about general business systems adopted in large modern commercial and industrial enterprises; in particular,

(a) Subdivision of the duties of various officers, and their correlation;

(b) Correspondence, accounting, orders, receipts, etc.;

(c) Causes of loss, waste, inefficiency, etc., and possibble remedies.

Merely knowing the facts is not sufficient: you must see cleaely the necessity for a certain organization. Only then will you find a right place in it for yourself and efficiently discharge your duties.

5. Do not get "rusty" on general life questions; read books on history, economics, philosophy, etc., with the view of finding the underlying facts and motives in human relations. Do not adhere too readily to a traditional school; work out your principles for yourself, and be willing to change them when new evidence is laid before you. A man in a responsible position must be a well educated man; he meets a great many men, and has to face new situations. Therefore he must be well informed on things in general, and ought to be able to judge about them.

C. Training of the Character. Engineering and business knowledge are the necessary conditions for usefulness ("success" and usefulness are not always the same), but the proper development of the character is the third necessary condition.

What is the use of having a profound knowledge of engineering, if you have not the necessary perseverance to achieve results; or to have a knowledge of business forms and relations, if your temper is such that nobody cares to be associated with you in business.

Practice daily the qualities of the character that you find essential for a good citizen and a good business man.

1. Work patiently on any problem until a result is achieved. If it should be impossible to get satisfactory results, at least make clear to yourself the nature of the hindrances.

2. Be honest in all things; do not be afraid to confess your mistakes or your ignorance. Train your character by doing your work cheerfully.

*Abstract of an address delivered before the New York, Electrical Society, October 31st, 1906.

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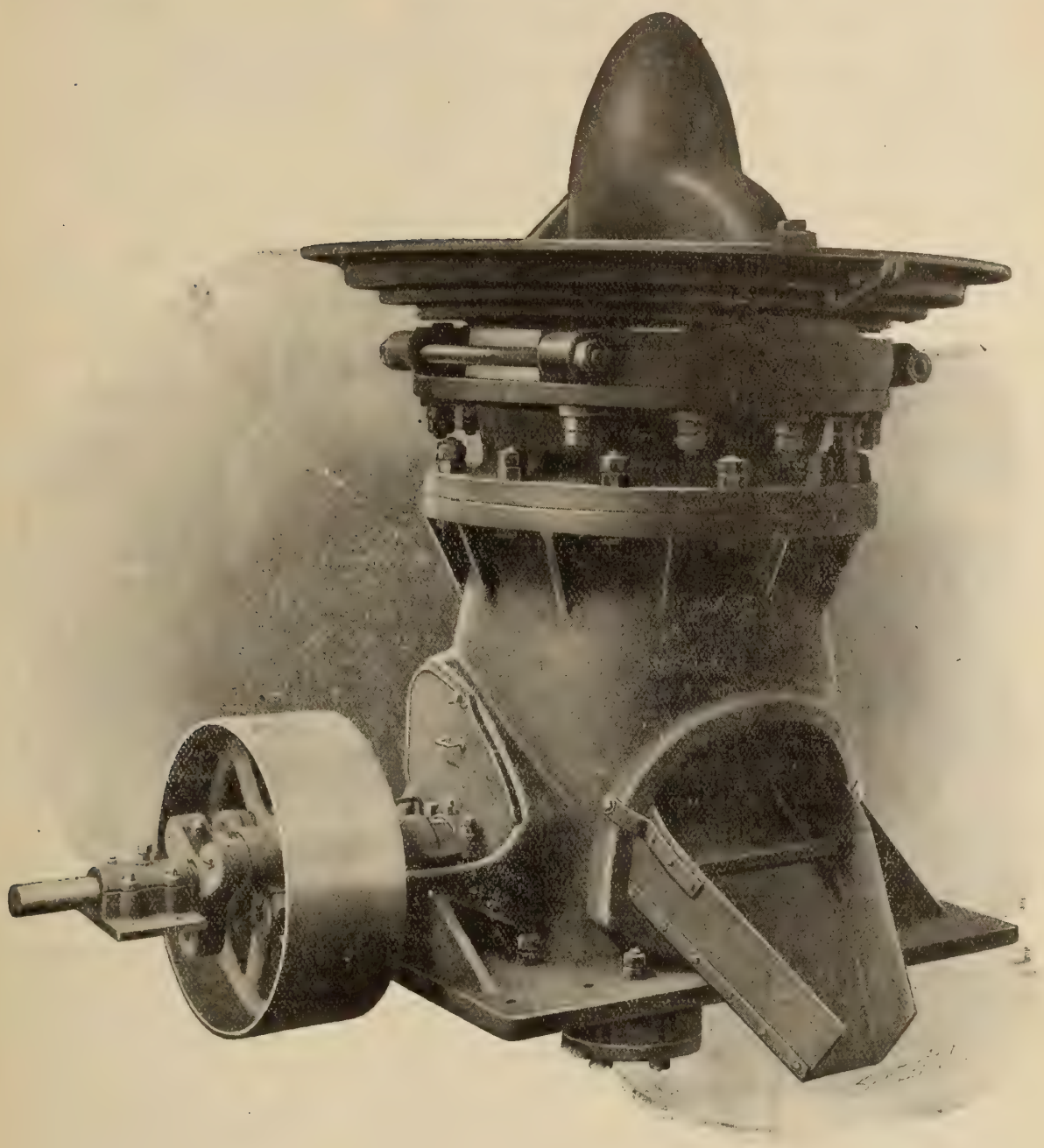

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3. Keep down your selfish personality and ambition. Do not let them interfere with your business. *The highest goal of personality and ambition is to have your part of the work done in the most ideal way.*

4. Be generous, polite, and considerate to others; there are no circumstances where you would be justified in breaking this rule. Remain dignified even under unjust reproof.

5. Work with the understanding that your activity of today shapes your future. You need not trust to chance; *your opportunity will come when you are ready for it.*

PART II.—UNDERLYING MOTIVES.

(A THEORY OF LIFE.)

Some men are happy and efficient in their work without having any clearly defined conceptions of life and its purpose. In a great majority of cases, however, a lack of a workable theory of life brings with it a decrease in possible efficiency and in personal satisfaction. It is of importance, therefore, to know.

A. What are the principal limitations and wrong beliefs that are hampering engineers in their work.

B. How these limitations can be removed by working out a theory of life that gives a general meaning to man's activity.

C. How an engineer's work is shaped, when his underlying motives are illumined by such a theory of life.

A. USUAL LIMITATIONS that prevent an engineer from being fully efficient and happy in his work.

1. Belief that he is underpaid; abnormal striving after money.

2. Belief that his efforts are not appreciated by his employer; also that there is no chance for promotion.

3. Lack of knowledge, theoretical or practical; lack of general education; a deficient knowledge of business forms and human relations. This is often accompanied by a belief that he has no time for study; in cases where a man has not exercised his mind for a long time, he has also to contend with his own mental apathy.

4. Deficiencies in character, such as weakness, roughness, egotism, narrowness, pedantry, absent-mindedness, laziness, etc.

5. Lack of enthusiasm due to the absence of a guiding and unifying purpose in life. This is particularly noticeable in very young men who are just beginning to form their own conception of life, and in older men who already see the end of their usefulness and cherish no more illusions.

B. A THEORY OF LIFE. Each man must work out for himself a practicable theory of life; this will make his acts and words, thoughts and feelings, harmonious and consistent. The experience of humanity past and present is the material to work on; his reason is called upon to interpret this, and his conscience is the court of final appeal.

The following is *an example* of such a theory of life: (*)

(*) It may seem presumptuous on the part of the writer, who is not a philosopher by trade, to formulate a "theory of life"; this he gives, however, simply in order to illustrate what a practical doctrine of life (not a "canned" religion) may be. For the author personally this doctrine is the truth he believes in and according to which he tries to shape his life; for others it may serve merely as an example. He hopes that by criticizing his metaphysics readers may make their own conceptions on the ubject clearer to themselves, and in this way be indirectly benefited even by a theory presumably wrong.

1. The Universe, including man, is governed by an Infinite Intelligence, which is manifested in man as his conscious life. There is no meaning in a man's life if it be detached from other men's lives. In proportion as he becomes conscious of this one, infinite life, common to all men, his own life becomes reasonable and harmonious, and the fear of poverty, sickness, old age and death gradually disappears.

2. The highest purpose of life is to work for the realization of the above ideal conditions of life on earth. We do this either by actually removing certain hindrances and fetters (practical work), or by making this great work clearer to others (literary, educational work, preaching, etc.).

3. Once this attitude is understood, the real compensation for the work consists, not in money and notoriety, but in the state of consciousness reached. This is manifested in particular:

(a) In a clear and definite program of life, and a ready answer for all difficulties (doing your best).

(b) In a state of harmony and good fellowship with all men, through the understanding of that life which is common to all.

(c) In a freedom from fear, anger, jealousy, apathy, and other limitations caused by the assumption that life is an accidental chain of phenomena and circumstances.

WORK ILLUMINED BY HIGHER IDEALS. Once he has obtained a workable life-theory, all of the limitations enumerated above, that prevent an engineer from being efficient and satisfied in his work, can be removed by actually applying this theory to his daily work.

1. The belief that he is underpaid or not appreciated enough loses its power; the man works no more for a company or corporation. He works for his conscience sake, and finds his true compensation in the results of his work.

2. He is full of desire to do as much as he can, and not as little as he is allowed to. For this reason he wants to know much and have his knowledge in a practical form, ready for use. He is active and studious all the time, and the expression "mental lethargy" is incomprehensibe to him.

4. He frees himself from possible shortcomings in his character by keeping the ideal of perfection continually before his mind's eye. He no longer finds difficulty in handling men and in treating his co-workers and chiefs aright; he has a sincere ympathy for them, tries to help them, and to make their work more pleasant and efficient.

5. He is full of enthnsiasm, for he is aware of the infinite importance of his life and work. His work is infinite as is Life itself; and each problem solved brings with it a higher and more important problem, brings more truth and light into his consciousness.

CONCLUSION—(*Credo*).

1. Make yourself ready for a broader and higher field of activity; then your opportunity will surely come.

2. The true purpose and value of engineering activity lie in providing better and easier ways for satisfying ordinary human needs. This provides more leisure and opens new possibilities for a higher spiritual and intellectual devlopment of humanity.

3. The engineer's personal satisfaction consists in knowing this high purpose of his vocation, and in giving his service at a maximum efficiency. The other compensation is a result and not the purpose.

JOHN T. FARMER

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Page
Harvey, J. 20
Peat & Sons, James 14

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Nay, Anderson & Co. 22
Stimson & Co., G. A. 21

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Canadian White Co. 6

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Page
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Montreal Pipe Foundry Co. 9

PIPE (WOODEN)
Canadian Pipe Co. 9
Dominion Pipe Co. 4
Pacific Coast Pipe Co. 20

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Allis-Chalmers-Bullock 11
Canadian Buffalo Forge Co. 4
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Canada Foundry Co. 23
Drummond, McCall & Co 14
Mussen & Co., W. H. C. 3
McDougall Caledonian Iron Works Co., John 19

ROAD MACHINERY
Cameron & Co., Hugh 16
Climax Road Machine Co. 7
Heaman, George 23
Morrison & Co., T. A. 13
Sawyer & Massey Co 16

ROCK DRILLS
Allis-Chalmers-Bullock 11

ROPE
Allan, Whyte & Co. 21
Dominion Wire Rope Co. 24
Greening Wire Co., B. 21

STEEL BARS (CORRUGATED)
Corrugated Steel Bar Co. of Canada .. 16

STRUCTURAL IRON AND STEEL
Canada Foundry Co. 23
Dominion Bridge Co. 15
Jenks & Dresser 16
Locomotive & Machine Co. 15
McGregor & McIntyre 16
Phoenix Bridge & Iron Works 15

STONE
Crushed Stone, Limited 16
Doolittle & Wilcox 21

SHOVELS (STEAM)
Allis-Chalmers-Bullock 11
Beatty & Sons, M. 22
Canada Foundry Co. 23
Hopkins & Co., F. H. 24
Locomotive & Machine Co. 15
Mussen & Co., W. H. C. 3

SEWER PIPE
Bremner, Alex. 15
Canadian Sewer Pipe Co. 17
Dominion Sewer Pipe Co. 14
Toronto Pottery Co. 22

SHOVELS
Canadian Shovel & Tool Co. 5
Hopkins & Co., F. H. 24
Mussen & Co., W. H. C. 3

TELEPHONE SUPPLIES
Northern Electric & Mfg. Co. 4

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Ontario Wind Engine & Pump Co. 17

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A NEW STYLE OF WIRE-WOUND WOOD PIPE.

The Dominion Wood Pipe Company is the name of a new firm recently organized in Vancouver for the purpose of manufacturing wooden pipe for water transmission of all kinds. This new company is composed of practical men who have had considerable experience in the manufacture of this kind of pipe, and whose combined knowledge and ideas of how to produce the best results are embodied in the "Dominion" wood pipe. A cut of this pipe appears in their advertisement in another part of this paper, and shows very clearly their new method of winding the wire so as to overcome what has heretofore been the only objection of engineers to wood stave pipe. An extract from a letter they have been sending out to inquirers, given below, explains fully this new style of winding. The following is their letter:—

"We take this opportunity of announcing that by the middle of January next, we will have the best equipped and the largest factory in Canada for the manufacture of Wire Wound and Continuous Wood Stave Pipe and to draw your attention to some of its many superior points.

We have secured an extensive site in New Westminster on the B. C. Electric, C. P. R. and Great Northern Railways and adjacent to tide water which gives us excellent shipping facilities.

We are erecting dry kilns of the most modern type, enabling us to purchase green lumber in the open market and to secure absolutely clear Douglas fir, free from knots, pitch seams, shakes, etc., and to thoroughly dry it for our purpose. This want has been the chief drawback in making good pipe during the present year.

We have applied for patents for a new system of wrapping two independent parallel wires simultaneously around the pipe instead of the one wire as formerly. The advantage of this improvement is that in the event of one wire being damaged and not being detected it simply reduces the factor of safety from 5.0 to 2.5. In the case of the old system of winding, the breaking of the wire rendered the pipe valueless. This method of winding also increases the strength of the pipe at each end by 50%.

The weakness of the pipe in the past has been in the coupling. This has been overcome by use in designing a Header, which makes a scientifically perfect joint, and if the pipe is properly laid, leaks are impossible. An application for patent has also been made for this device.

To give a perfect dipping or coating, we have arranged to heat the pipe to such a degree, that when dipped, the composition which is

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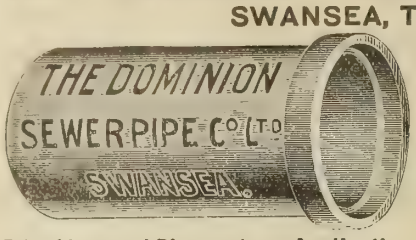
THE DOMINION SEWER PIPE CO., LIMITED
SWANSEA, TORONTO, ONT.



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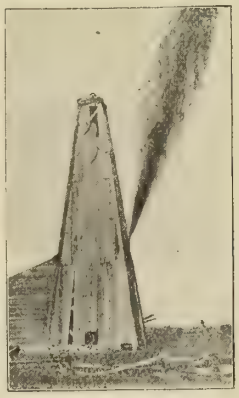

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kept at a temperature of 350° to 370° Fah., penetrates and reaches every point of the outer surface of the stave and wire.

We will esteem it a great favor if you would give us an opportunity of tendering on any pipe you may require.

We are, Dear, Sir,

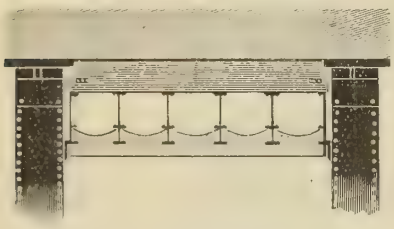
Yours very truly,

THE DOMINION WOOD PIPE CO.

Temporary office Fee Block, Vancouver B. C."

NEW CONSTRUCTIONAL DEVICE.

The accompanying illustration shows a new form of construction which has found favor in United States and is about to be introduced in Canada by the Climax Road Machine Co., of Hamilton. It



consists of corrugated arch plates put between the steel I beams to support concrete floors in bridge work and fireproof buildings.

A. C. McKenzie & Co., contractors, Vancouver, B.C., have dissolved, Mr. McKenzie retiring.

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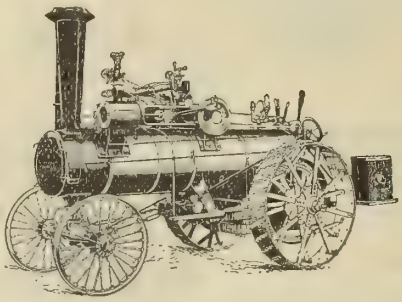
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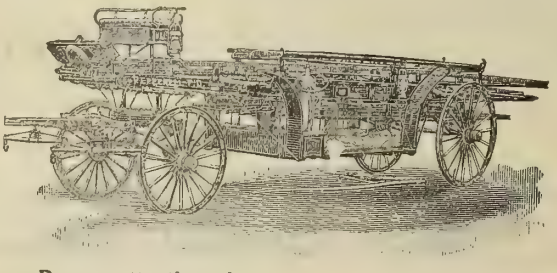
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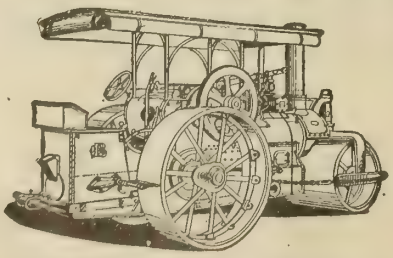
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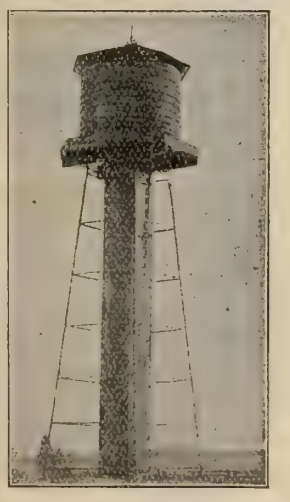

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Note the High Grade of National. Compare it with others.

Year.	No Samples Tested.	Soundness Faiji Test.	Specific Gravity	Residue in Test on No. 100 Sieve	Setting Time in Minutes		Tensile Strength in pounds per square inch.									
							Neat.					3 (Sand) to 1 (Cement)				
					Initial	Final	1 dy.	7 dys.	28 dys.	3 mos.	1 yr.	1 dy.	7 dys.	28 dys.	3 mos.	1 yr.
1903	20	O.K.	3.135	2.1	162	345	307	701	783	827	*	74	214	299	367	*
1904	44	O.K.	3.150	2.0	132	342	300	744	848	914	938	86	262	354	401	427

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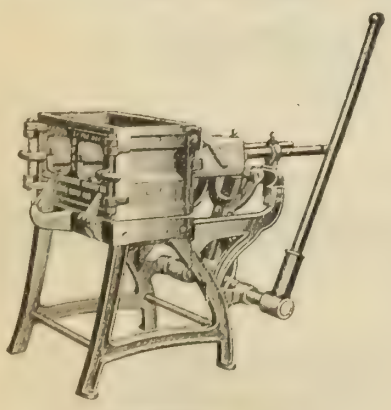

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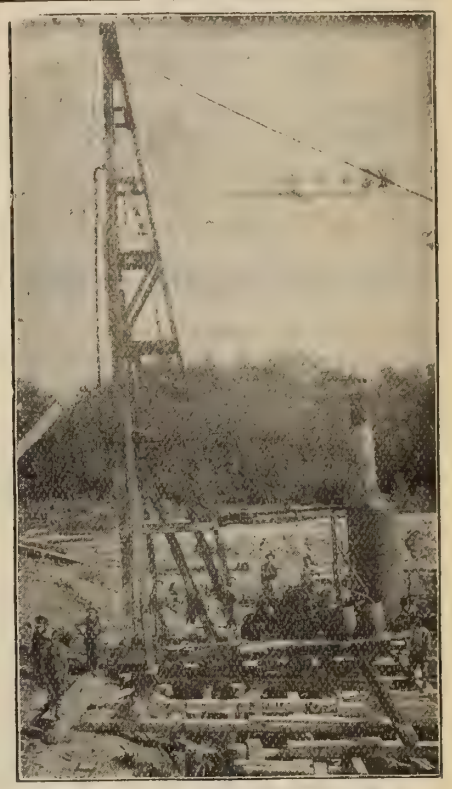

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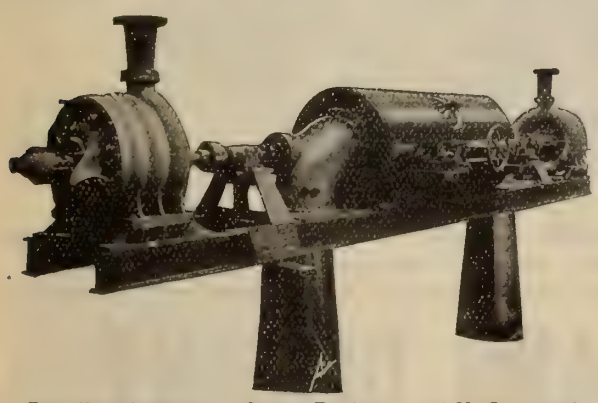

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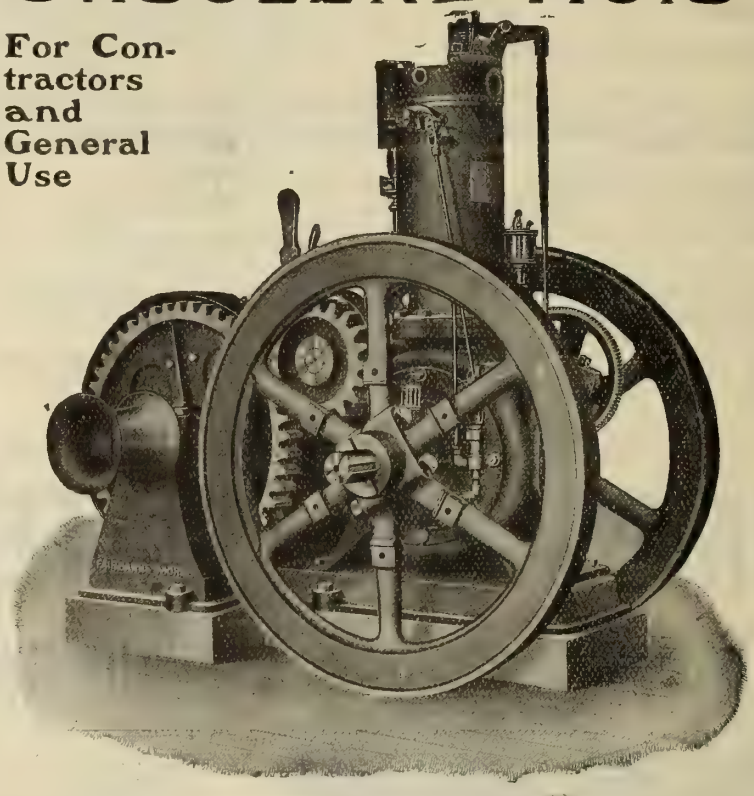

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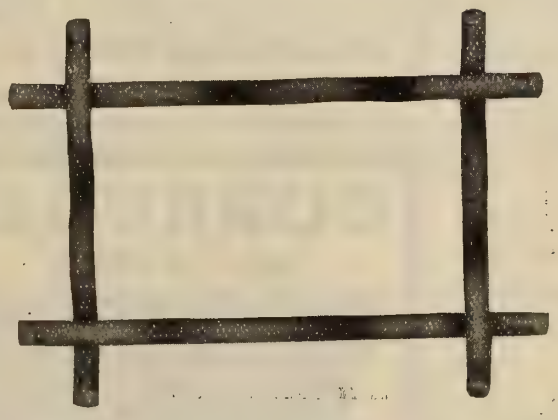

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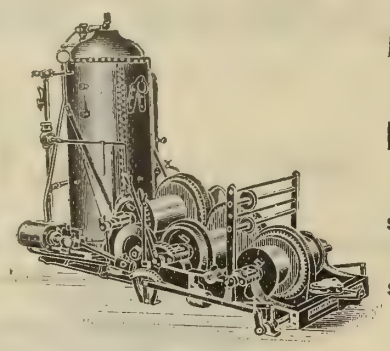

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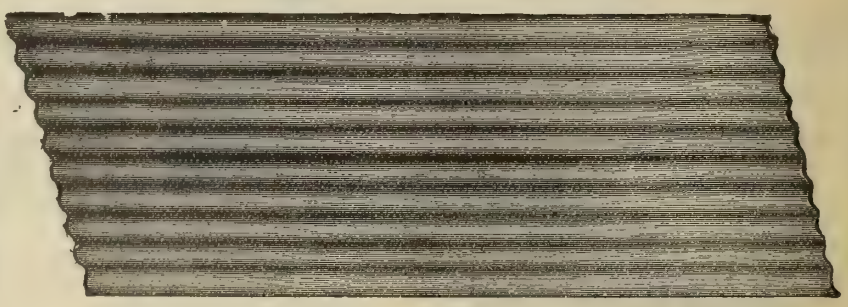

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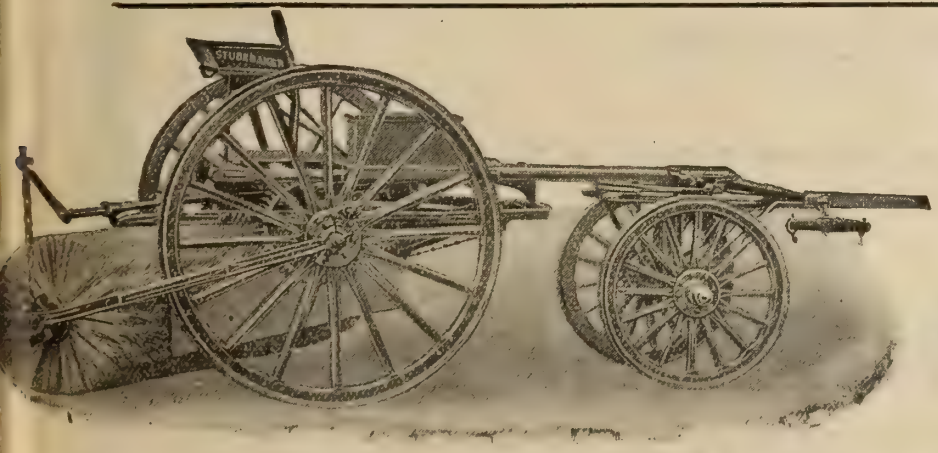

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